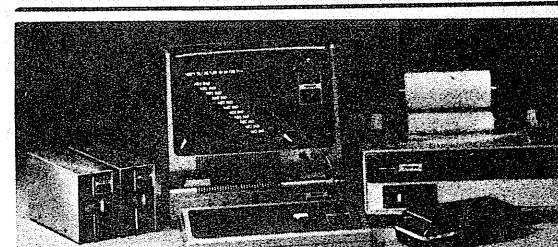
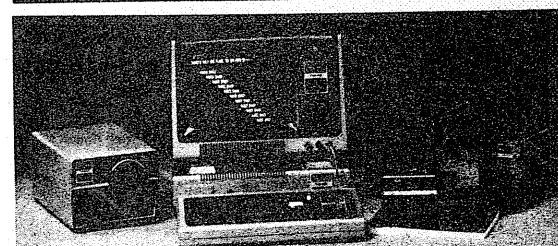
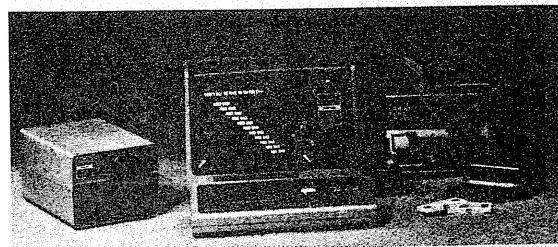
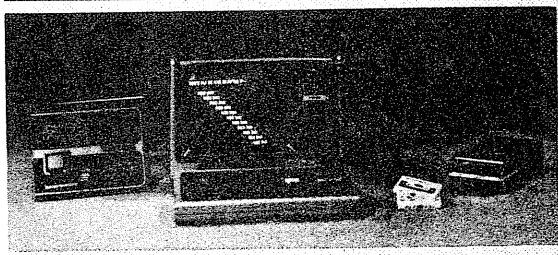
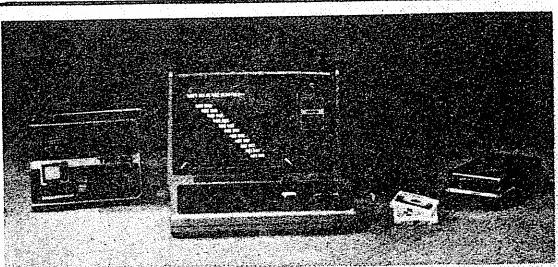


RADIO SHACK COMPUTER OWNERS

TRS-80 MODEL I AND MODEL II

TRS-80

SOFTWARE CATALOG NO. 3



2

H & E COMPUTRONICS, INC.

H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

Box 149
New City, New York 10956
(914) 425-1535

DEAR TRS-80 OWNER:

HERE IS YOUR NEW H & E COMPUTRONICS INC. CATALOG. FEEL FREE TO RIP THE PAGES APART. EVERYTIME YOU PLACE AN ORDER, WE WILL SEND YOU A NEW CATALOG.

DO YOU SUBSCRIBE TO THE TRS-80 MONTHLY NEWSLETTER? HERE'S WHAT YOU GET WITH YOUR SUBSCRIPTION:

(1) A NEW ISSUE EVERY MONTH OFFERING LISTINGS OF MAJOR PROGRAMS, A BEGINNERS CORNER, HELP IN LEARNING MACHINE LANGUAGE, BUSINESS PROGRAMS AND AIDS, LATEST INFORMATION ABOUT NEW RADIO SHACK PRODUCTS (AND INSIDE INFORMATION ABOUT PRODUCTS NOT YET RELEASED), HELPFUL HINTS AND ADVICE...AND MUCH MORE.

(2) A FREE WORD PROCESSOR (THAT SIMULATES MANY OF THE FOUND ON ADVANCED WORD PROCESSING SYSTEMS).

(3) MONEY BACK GUARANTEE ON ALL SOFTWARE PURCHASED FROM US (LESS \$3 FOR PROCESSING AND MAILING COSTS).

(4) INSTANT PROCESSING OF ALL ORDERS (ALL ORDERS ARE NOW PROCESSED WITHIN 24-HOURS).

(5) PHONE ORDERS ARE ACCEPTED (24-HOURS PER DAY). ORDERS TAKEN BY MARYANN, OUR SOFTWARE MANAGER (9 AM TO 5 PM-NEW YORK TIME-MONDAY-SATURDAY). AT OTHER TIMES, A TELEPHONE ANSWERING MACHINE WILL TAKE YOUR ORDER.

(6) ALL SUBSCRIBERS WILL RECEIVE VOLUME III OF THE H & E COMPUTRONICS INC. SOFTWARE CATALOG WHICH WILL INCLUDE A NUMBER OF NEW PRODUCTS (HARDWARE & SOFTWARE).

REMEMBER-WE ARE IN NO WAY RELATED TO RADIO SHACK. RADIO SHACK (PART OF TANDY CORPORATION) IN AN INDEPENDENT COMPANY. OUR GOAL IS TO SUPPORT TRS-80 OWNERS BY PROVIDING INFORMATION, PRODUCTS AND SOFTWARE FOR THE TRS-80...NOT SOLD BY RADIO SHACK.

WE ACCEPT VISA, MASTERCHARGE, CASH, CHECK OR C.O.D. ORDERS. THERE IS NO CHARGE FOR POSTAGE ON ORDERS SHIPPED WITHIN A U.P.S. AREA (UNITED PARCEL SERVICE). ADD \$3 FOR ORDERS TO BE SHIPPED BY U.S. MAIL (OUTSIDE OF THE UNITED STATES OR OUTSIDE OF THE U.P.S. SHIPPING AREA). ADD \$3 FOR ALL C.O.D. ORDERS. ADD \$1 FOR ALL ORDERS UNDER \$10. ADD NEW YORK STATE LOCAL SALES TAX ON ALL ORDERS TO BE SHIPPED WITHIN NEW YORK STATE.

5-STAR EDITION
for users of
Radio Shack's TRS-80*



5-STAR EDITION
for users of
Radio Shack's TRS-80*

TRS-80 TRANSFORMED WITH PROFESSIONAL SOFTWARE PACKAGES

AND MUCH MORE

Software with / Manual
Manual / Alone
CP/M-operating system modified for use with TRS-80 computer and disks. In addition to the standard CP M utilities of Editor, Assembler, Debugger etc., we have added: DCV2 (Utility to convert system tapes to CP M files) DISKAS & CADISK (Utilities to back up files to tape and recover to disk) MOVER (Program to transfer files with single drive systems) \$145/\$25

All items listed below operate in conjunction with the CPM operating system.

MAC — 8080 Macro Assembler Full Intel macro definitions and Pseudo Ops include RPC, IFP, REPT, TITLE PAGE and MACLIB. Z-80 library included. Produces Intel absolute hex output plus symbolic file for use by SID (see below) \$100/\$15

SID — 8080 symbolic debugger Full trace pass count and break-point program testing system with back-trace and histogram utilities. When used with MAC provides full symbolic display of memory labels and equated values \$85/\$15

TEX — Text formatter to create paginated, page-numbered and justified copy from source text files drectable to disk or printer \$85/\$15

DESPOLL — Program to permit simultaneous printing of data from disk while user executes another program from the console \$50/\$1

Disk Extended BASIC — Version 5. ANSI compatible with long variable names WHILE WEND chaining variable length file records \$300/\$25

BASIC Compiler — Language compatible with Version 5 Microsoft interpreter and 3-10 times faster execution. Produces standard Microsoft relocatable binary output. Includes Macro-80 Also linkable to FORTRAN-80 or COBOL-80 code modules \$350/\$25

FORTRAN-80 — ANSI 66 (except for COMPLEX) plus many extensions. Includes relocatable object compiler, linking loader library with manager. Also includes MACRO-80 (see below) \$400/\$25

COBOL-80 — ANSI 74 Relocatable object output. Format same as FORTRAN-80 and MACRO-80 modules. Complete ISAM, interactive ACCEPT DISPLAY COPY EXTEND \$625/\$25

MACRO-80 — 8080 Z80 Macro Assembler, Intel and Zilog mnemonics supported. Relocatable linkable output. Loader, Library Manager and Cross Reference List utilities included \$149/\$15

EDIT-80 — Very fast random access text editor for text with or without line numbers. Global and intra-line commands supported. File compare utility included \$89/\$15

PAYROLL SYSTEM — Maintains employee master file. Computes payroll withholding for FICA, Federal and State taxes. Prints payroll register, checks quarterly reports and W-2 forms. Can generate ad hoc reports and employee form letters with mail labels. Requires CBASIC Supplied in source code \$605/\$35

APARTMENT MANAGEMENT SYSTEM — Financial management system for receipts and security deposits of apartment projects. Captures data on vacancies, revenues etc. for annual trend analysis. Daily report shows late rents etc. vacancy notices, vacancies, income lost through vacancies etc. Requires CBASIC Supplied in source code \$605/\$35

INVENTORY SYSTEM — Captures stock levels, costs sources, sales, ages, turnover, markup etc. Transaction information may be entered for reporting by salesman type of sale, date of sale, etc. Reports available both for accounting and decision making. Requires CBASIC Supplied in source code \$605/\$35

CASH REGISTER — Maintains files on daily sales. Files data by sales person and item. Tracks sales, overrings, refunds, payouts and total net deposits. Requires CBASIC Supplied in source code \$605/\$35

CBASIC-2 Disk Extended BASIC — Non-interactive BASIC with pseudo-code compiler and runtime interpreter. Supports full file control chaining integer and extended precision variables etc. \$90/\$15

Flippy Disk Kit — Template and instructions to modify single sided 5 1/4" diskettes for use of second side in singled sided drives \$97.50

Selector III — Multi (i.e. up to 24) Key Data Base Processor. Comes with applications programs including Sales Activity, Inventory, Payables, Receivables, Check Register, Expenses, Appointments, and Client Patient. Requires CBASIC Supplied in source code. Enhanced version for CBASIC-2. \$345/\$20

G2 Level III BASIC by Microsoft

Powerful extensions to Level II BASIC including 10 machine language user calls, long error messages, keyboard debounce, graphics commands and much more. Price includes User Manual, Quick Reference Card and a pre programmed cassette tape \$45

* Radio Shack and TRS-80 are trademarks of Tandy Corporation

Lifeboat Associates, specialists in microcomputer disk software, is proud to offer the first professional disk-based language and utility package for the Radio Shack TRS-80 computer. Written by Microsoft, creators of Level II BASIC, the package runs on a TRS-80 system with 32K RAM, one or more drives and TRSDOS. The software is supplied on diskettes and consists of:

SUBROUTINE LIBRARY

a complete library of subroutines existing as relocatable linkable modules for FORTRAN or assembler programs—e.g., double precision square root, natural log, transcendentals, etc.

DISK TEXT EDITOR

to create and modify FORTRAN and assembler programs as disk files also can be used as a general purpose text editor for correspondence and other documents

LINKING LOADER to link-edit and load FORTRAN and assembler modules for execution

This high-powered professional software package with full documentation is available at the
DISCOUNT PRICE OF

\$150.

PER COMPUTER SYSTEM

\$80

The Macro Assembler, Loader, Editor, and Cross Reference Utilities alone

\$80

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™
New York 10956

Box 149

Please send the following:

Software	Price
— manual alone	
— manual alone	
Check <input type="checkbox"/> UPS C.O.D. <input type="checkbox"/> MasterCharge	shipping
Visa	\$1 for C.O.D.
	Total

Account #

Exp. Date

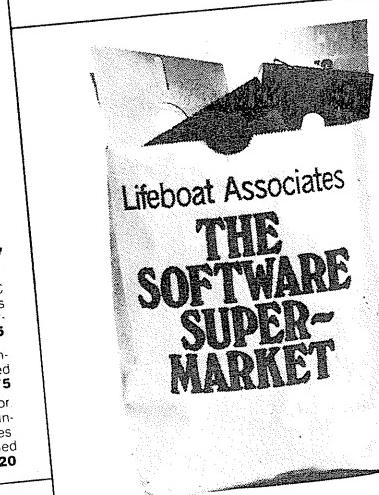
Signature
My computer configuration (specify disk system)

Name
Address
(No P.O. Box)

City

State Zip

B



TM

CHECKBOOK II

BY ALAN MEYERS

FOR LEVEL II 16K & 32K TAPE BASED
TRS-80'S

The technical expertise of TBS has been synthesized into a program that upgrades checkbook analysis to an interesting, informative and fun portion of your regimen. This program outshines the other programs of its type to such a degree that it is a new category of checkbook analysis for the consumer.

FEATURING:

- * Keyboard input with 5 character spaces for check number, 16 for whom to, 4 for code plus the ability to handle amounts up to \$99,999.99.

- * Graphic listing of checks in memory starting at any given check number.

- * Complete editing mode allowing changes in any or all columns plus deletion module.

- * Checkbook balancing with balance brought forward held in memory and recorded on tape. Program will handle balances up to \$999,999.99. Graphic screen printout starting at any given check number.

- * Bank reconcile with listing of all outstanding checks. Program automatically deletes all cleared checks if checkbook balances.

- * Search and total routine with the capability of searching all checks in memory or an entire month, by date, check number, whom to or code.

- * Tape input/output with the ability to record from any given check number. Automatically names file by check numbers.

- * Complete printout of everything on screen with the press of a button from anywhere in the program.

- * Visual numeric sort routine.

Automatic after keyboard input.

- * 16K version handles 75 transactions. The 32K version (without DOS) can handle an amazing 400!

- * Plus many other interesting devices to make checkbook balancing enjoyable, for a change.

Checkbook II does the job RIGHT! Your bad experiences with personal finance programs are over. The Checkbook II is the personal finance program you need. You owe it to yourself to start using Checkbook II now.

CHECKBOOK II
T80-0015

SHPG WGT: 1 lb. PR: \$18.50 QTY: 1

MENU

1. KEYBOARD INPUT
2. LIST AND EDIT
3. PRINT WITH BALANCE
4. SEARCH AND TOTAL
5. RECONCILE
6. SORT
7. INPUT FROM TAPE
8. OUTPUT TO TAPE
9. CHECK FILE LENGTH
10. CLEAR

WHICH NUMBER? ..

KEYBOARD INPUT

CK#	DATE	TO WHOM	AMOUNT	CODE
710	4/10/79	ATLANTA GAS	34.55	GAS
711	4/11/79	TBS	51.50	SOFT
712	4/11/79	ACME AUTO SALES	3,452.82	AUTO
712.1	4/11/79	DEPOSIT	3,000.00	LOAN
713	4/12/79	RADIO SHACK	125.33	
714	4/13/79	GEORGIA	43.55	TAX
715	4/14/79	IRS	348.66	TAX
715.1	4/14/79	DEPOSIT	675.87	SAL
716	4/15/79	COMPUTER STORE	123.45	COMP
717	4/20/79	COMPUTER STORE	14.44	COMP
717.1	4/20/79	DEPOSIT-COMPINC	588.00	XINC

CHECK BALANCING

CK#	DATE	TO WHOM	AMOUNT	BALANCE
709	4/09/79	GEORGIA POWER	46.78	3,526.64
710	4/10/79	ATLANTA GAS	34.55	3,492.09
711	4/11/79	TBS	51.50	3,440.59
712	4/11/79	ACME AUTO SALES	3,452.82	12.28
712.1	4/11/79	DEPOSITS	3,000.00	2,987.72
713	4/12/79	RADIO SHACK	125.33	2,862.39
714	4/13/79	GEORGIA	43.55	2,818.84
715	4/14/79	IRS	348.66	2,470.18
715.1	4/14/79	DEPOSIT	675.87	3,146.05
716	4/15/79	COMPUTER STORE	123.45	3,022.60
717	4/20/79	COMPUTER STORE	14.44	3,008.16

PRESS ENTER TO CONTINUE ..

TRS-80™

DISK PACS

MAIL PAC

- STORES OVER 1200 RECORDS PER DISKETTE (850 ON D.O.S. DISKETTE)
- COMPLETE RANDOM ACCESS
- VARIABLE FIELDS (DOES NOT LIMIT THE LENGTH OF ANY NAME OR ADDRESS)
- SORTS BY LETTER CODE, NUMBER CODE, NAME, STREET ADDRESS, CITY, STATE, ZIP, CODE OR COMBINATION
- ALMOST INSTANT SORTING (INCORPORATES THE EFFICIENT GSF MACHINE LANGUAGE SORT — 30 TIMES FASTER THAN ANY BASIC ROUTINE)
- INDEX Allows FOR INSTANT ACCESS TO ANY RECORD BY NAME OR NUMBER
- COMPLETE MANUAL AND DOCUMENTATION
- PRINTS MAILING LISTS BY NAME OR ZIP CODE (1,2, 3 or 4 ACROSS MAILING LABELS)
- PRINTS COMPLETE MAILING LIST BY NAME OR ZIP CODE (1 RECORD PER LINE)
- CAN BE USED WITH 1, 2, 3 or 4 DISK DRIVES
- REQUIRES 32K or 48K SYSTEM AND GSF OR DOSORT (DESCRIBED IN THE H & E COMPUTRONICS, INC. CATALOG

COMPROC COMMAND PROCESSOR (FROM RACET COMPUTERS)

- AUTOMATICALLY LOAD AND EXECUTE ANY SEQUENCE OF SYSTEM AND/OR BASIC PROGRAMS AND DATA FROM POWER UP.
- COMMAND FILES CREATED, SAVED AND EDITED IN BASIC
- SOPHISTICATED OPTIONS INCLUDE INTERACTIVE PROMPTING AND SUBSTITUTIONAL PARAMETERS
- ALLOWS NON-COMPUTER PERSONNEL TO EASILY EXECUTE PROGRAMS
- NOW (FOR EXAMPLE) YOU CAN SEE THE DIRECTORY, LOAD A SYSTEM PROGRAM (SUCH AS GSF), LOAD BASIC, LOAD A BASIC PROGRAM (SUCH AS MAIL), AND LOAD A DATA FILE (SUCH AS AN INDEX) — ALL AT THE TOUCH OF ONE-BUTTON (TO TURN ON YOUR TRS-80) THE USER CAN USE COMPROC TO SPECIFY ANY SERIES OF UP TO 9 AUTO COMMANDS.

"SOME COMMON BASIC PROGRAMS"

(FROM THE BASIC BUSINESS SOFTWARE COMPANY, INC.)

This package consists of 76 Programs which appeared in Osborne & Associates book, "Some Common Basic Programs," which was written by Lon Poole and Mary Borchers. The programs are broken up into four different areas:

- | | |
|-----------------------|--------------------------|
| (1) Statistics | (3) Math |
| (2) Finance | (4) Miscellaneous |

This package is useful to many individual needs for it covers a very broad range of applications. On the following page is a list of all the programs which are included in this package.

The programs were originally written in Wang Basic, but we have converted these basic programs to the individual basic languages that we have listed below for sale. All packages include one or more floppy disks, a supplementary instruction manual and may also include the above mentioned book, "Some Common Basic Programs," which does serve as the users manual. This book provides listings of all the programs, example runs and information on how to alter the programs if you desire to change it slightly for a particular need.

STATISTICS

(FROM THE BASIC BUSINESS SOFTWARE COMPANY)

**The Following Statistics Programs Are Included
And All Will Run In 8K Of Memory**

- | | | |
|---------------------------------|--------------------------------|-------------------------------------|
| 1. Permutations + Combinations | 9. Power Curve Fit | 17. Bivariate Normal Distribution |
| 2. Basic Statistics | 10. Multiple Linear Regression | 18. Geometric Distribution |
| 3. Moments, Skewness * Kurtosis | 11. Normal Distribution | 19. Poisson Distribution |
| 4. Anova (one-way) | 12. T-Statistics Evaluation | 20. Binomial Distribution |
| 5. Anova (two-way) | 13. T-Distribution | 21. Weibull Distribution |
| 6. Linear Regression | 14. Chi-Square Evaluation | 22. Spearman's Rank |
| 7. Exponential Curve Fit | 15. Chi-Square Distribution | 23. Contingency Table |
| 8. Logarithmic Curve Fit | 16. F-Distribution | 24. Logarithmic Normal Distribution |

PRICES INCLUDES 100 PAGE MANUAL AND DISKETTE

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING. FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

ALL PROGRAMS ARE FULLY DOCUMENTED

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE

Box 149

New City, New York 10956



24 HOUR ORDER LINE
(914) 425-1535



PLEASE SEND ME:

MAIL (\$99.95) GSF (\$24.95) DOSORT (\$34.95) STATISTICS (\$30.00)
SOME COMMON BASIC PROGRAMS (\$30.50) COMPROC (\$19.95)
FOR GSF OR DOSORT SPECIFY 16K 32K 48K

CREDIT CARD NUMBER EXP. DATE

SIGNATURE

NAME

ADDRESS



TRS-80TM

LIBRARY 100

FROM THE BOTTOM SHELF

100 TRS-80 LEVEL II PROGRAMS
\$49.50 for ALL 100 Programs

5 cassettes - from the first mass marketer of ready to load software.

Quality in Quantity - a value in excess of \$500.00 (Check the price per program in other ads).

For the first time there are enough users of a single type of computer to justify mass marketing of high quality, ready-to-load programming. We are only able to market at this price because WE EXPECT TO SELL A GOB OF THEM . . .

Available for immediate delivery. Buy now!! Volume only will allow us to continue marketing the LIBRARY 100 at the \$49.50 price.

- 25 - BUSINESS AND FINANCE. Moving ad, Sales-Cost Margin, RE Investment Analysis, Interest Determination, Depreciation, and 19 more.
- 15 - GRAPHICS. Advertisement, Red Baron's Enemy, Fireside, Blocks, and 11 more.
- 15 - EDUCATION. 5 Math, and 10 subjects.
- 15 - HOME. Nutrition, Xmas List, Travel Mileage, Shopping List, and 11 more.
- 30 - GAMES. Star Trek, Tiger, Shark, Memory Quiz, Stingray, and 26 more.
- 100 - programs which cost you 49.5 cents a piece!

The Greatest Bonus of all (FREE with order) TINY PILOT. No, TINY PILOT does not fly small airplanes. It is the first new language for your TRS-80. With just 6 of its commands even a child can be programming in minutes.

.....
COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™
Box 149

New City, New York 10956



24 HOUR
ORDER
LINE
(914) 425-1535



PLEASE SEND ME THE LIBRARY 100. \$49.50 IS ENCLOSED.

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

Box 149
New City, New York 10956
(914) 425-1535

LIBRARY 100 CONTENTS

BUSINESS AND FINANCE

PRESENT VALUE OF FUTURE SUM
FUTURE VALUE OF PRESENT SUM
COMPOUND INTEREST
DAYS BETWEEN DATES
PRESENT VALUE OF PAYMENTS
NOMINAL-EFFECTIVE INTEREST
FUTURE VALUE OF DEPOSITS
BOND-PRESENT VALUE
SALE-COST-MARGIN
MOVING SALES AD

SIMPLE INTEREST FOR DAYS
AMORTIZATION SCHEDULE
INSTALLMENT LOAD INTEREST RATE
TERM OF INSTALLMENT LOAD
REAL ESTATE INVESTMENT ANALYSIS
INTERNAL RATE OF RETURN
ALL DEPRECIATION CALCULATIONS
BOND-YIELD TO MATURITY
DAY OF WEEK

EDUCATION

ADD****SUBTRACTION****MULTIPLY****DIVIDE****FRACTIONS****DECIMALS
****BASE NUMBERS****EDUQUIZ****PILOT****

GRAPHICS

FRONT COVER****WIERD****RATTRACE****RANDOM AD****FIRESIDE****
LEFT RIGHT****BLOCKS****HERRING****LAUNCH****BLINKER****SNOOPY****
SNOW****STEP AD****GRAPHIC****WAR GAME****STAR TREK****SPEEDY****
LIFE****COUNT****ROAD RACE****FIFTEEN****

HOME

BARTENDER****NUTRITION****CONVERSION****CALENDAR****
BASE CONVERSION****CALCULATOR****VACATION****TELE CODE****
MESSAGE CENTER****NIGHT CHECKOFF****EXPENSE****BABY SITTER****
DRUNKOMETER****REMEMBER****XMAS LIST****MILEAGE****

GAMES

JUMBLE 1****SEARCH****MEMORY LETTERS****STRING RAY****
RUSSIAN ROULETTE****WHEEL OF FORTUNE****TOWERS****DECISION****
MEMORY NUMBERS****DOOMSDAY****SKETCH****FLIPPER****STAIRS****
ODD ONE****SPY SHIP****HORSE****SCISSORS****CRAPS****
STAR BLAZER****TIGER SHARK****UNJUMBLE****MIND READER****
ROACH RACE****JUMBLE 2****GYPSY****

RADIO SHACK COMPUTER OWNERS

TRS-80 BUSINESS PACS

DISK * CASSETTE

- **ACCOUNTS RECEIVABLE**
INCLUDES COMPLETE CUSTOMER LISTINGS AND REPORTS.
- **ACCOUNTS PAYABLE**
INCLUDES COMPLETE VENDOR LISTINGS AND REPORTS.
- **INVENTORY CONTROL**
COMPLETE INVENTORY LISTINGS AND EDITING WITH STOCK STATUS ALERT.
- **INVOICING**
PREPRINTED TRACTOR FEED FORMS OR PRINTS CUSTOMER FORM ON PLAIN WHITE TRACTOR FEED PAPER.
- **PAYROLL**
COMPLETE LISTINGS OF EMPLOYEE RECORDS, CALCULATIONS OF COMPLETE PAYROLL BY EXACT CALCULATION METHOD USED ON TAX TABLES.
- **COMPLETE BUSINESS PAC**
INCLUDES ACCOUNTS RECEIVABLE, ACCOUNTS PAYABLE, INVENTORY CONTROL, INVOICING AND PAYROLL (ALL DESCRIBED ABOVE PLUS A COMPLETE GENERAL LEDGER, BALANCE SHEET, INCOME STATEMENT AND BUDGET ANALYSIS).
- **MAILING LIST**
PRINTS LABELS (1 OR 2 ACROSS), STORES NAMES ON DISKETTE, SORTS BY ZIP CODE, ALPHABETICAL ORDER, BY NUMBER OR BY CATEGORY. INVOICING OPTION ALSO Allows FOR CUSTOMER BILLING.
- **COMPLETE HOME BUDGET**
THIS PROGRAM WILL DO IT ALL. IT WILL KEEP TRACK OF ALL YOUR MONTHLY BILLS...LET YOU KNOW WHAT BILLS ARE STILL UNPAID...LISTS OUTSTANDING CHECKS...BALANCES YOUR CHECKBOOK AND LISTS ALL DEDUCTIONS AT THE END OF THE YEAR FOR FEDERAL INCOME TAX RETURN.
- **SMALL BUSINESS ACCOUNTING PAC**
INCLUDES DOME BOOKKEEPING JOURNAL.
COMPLETE CHART OF 42 EXPENSE AREAS.
PROVISION FOR CUSTOM ACCOUNT AREAS.
REPORTS FOR YEAR TO DATE, YEAR TO LAST WEEK AND THIS WEEK.
- **CUSTOM PROGRAMMING**
WE HAVE A STAFF THAT CAN WRITE ANY CUSTOM BUSINESS PROGAM. ALL BUSINESSES DIFFER. WE WILL WRITE A PROGRAM TO CONFORM TO YOUR EXACT NEEDS. CALL FOR MORE INFORMATION.

- **INCOME TAX PAC A**

FOR LEVEL II 16 K
DOES FORM 1040

SCHEDULE A ITEMIZED DEDUCTIONS
SCHEDULE B INTEREST AND DIVIDENDS
SCHEDULE D CAPITAL GAINS AND LOSSES
SCHEDULE G INCOME AVERAGING
SCHEDULE TC TAX COMPUTATION

- **INCOME TAX PAC B**

FOR LEVEL II 16 K WITH OR WITHOUT PRINTER.
HAS ALL FEATURES OF INCOME TAX PAC A **PLUS**

FORM 1040 A
WORKS WITH OR WITHOUT LINE PRINTER
FORMATS FORM 1040 AND 1040A FOR TRACTOR FEED FORMS
SCHEDULE C INCOME FROM A PERSONALLY OWNED BUSINESS
FORM 2106 EMPLOYEE BUSINESS EXPENSE

- **PROFESSIONAL INCOME TAX PAC C**

FOR LEVEL II 16 K WITH DISK AND PRINTER (OPTIONAL)
HAS ALL FEATURES OF INCOME TAX PAC B **PLUS**
AUTOMATIC MEMORY STORAGE FOR INCOME TAX PREPARERS
INSTANT LINE CHANGE

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING. FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

— ALL PROGRAMS ARE FULLY DOCUMENTED —

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™

Box 149

New City, New York 10956



24 HOUR
ORDER
LINE
(914) 425-1535



PLEASE SEND ME:

ACCOUNTS RECEIVABLE (\$99.95) ACCOUNTS PAYABLE (\$99.95) INVENTORY CONTROL (\$99.95)

INVOICING (\$99.95) PAYROLL (\$99.95) COMPLETE BUSINESS PAC (\$499.95) MAILING LIST (\$99.95)

COMPLETE HOME BUDGET (\$99.95) SMALL BUSINESS ACCOUNTING PAC (\$99.95)

INCOME TAX PAC A (\$19.95) INCOME TAX PAC B (\$49.95) PROFESSIONAL INCOME TAX PAC C (\$99.95)

CHECK / DISK **OR CASSETTE**

CREDIT CARD NUMBER EXP. DATE

SIGNATURE

NAME

ADDRESS

ALL ORDERS PROCESSED IMMEDIATELY

RADIO SHACK COMPUTER OWNERS

TRS-80TM

GENERALIZED
SUBROUTINE
FACILITY

FROM  COMPUTES

GSF INCLUDES

EIGHTEEN ROUTINES DESIGNED TO PROVIDE THE TRS-80 WITH MUCH
CREATED FLEXIBILITY AND EXTENDED CAPABILITIES.

- SORT 1000-ELEMENT ARRAYS in 9 SECONDS!!
- SORT DATA 30 TIMES FASTER than the FASTEST BASIC SORT ROUTINE
- COMPRESS and UNCOMPRESS DATA
- MOVE DATA FROM ONE LOCATION TO ANOTHER
- DUPLICATE MEMORY
- READ and WRITE DATA TAPES RAPIDLY
- ELIMINATE TAPE INPUT-OUTPUT ERRORS
- FAST HORIZONTAL and VERTICAL LINES
- DISPLAY SCREEN CONTROL
AND MORE

DOSORT

DISK OPERATING SYSTEM SORT MERGE FOR THE SERIOUS DISK
SYSTEM USER. INCLUDES ALL GSF ROUTINES PLUS EXTENDED
ROUTINES FOR DISK OPERATION

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING. FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

ALL PROGRAMS ARE FULLY DOCUMENTED

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE

Box 149

New City, New York 10956



24

HOUR
ORDER
LINE



(914) 425-1535

PLEASE SEND ME:

GSF (\$24.95) _____ DOSORT (\$34.95) _____

FOR 16K _____ 32K _____ OR 48K _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

ALL ORDERS PROCESSED WITHIN 24 HOURS



— PROGRAMMING TOOLS FROM THE PROFESSIONALS —

ANOTHER FIRST FROM RACET COMPUTES -- GENERALIZED SUBROUTINE FACILITY "GSF"

- A SYSTEM for incorporating multiple machine language programs in a unified structure that provides easy access by TRS-80 BASIC users. Easily expanded by the user to include additional functions. Instructions furnished describing conventions used.
- GSF INCLUDES eighteen machine language subroutines providing the TRS-80 with much greater flexibility and extended capabilities.

SORT 1000-ELEMENT ARRAYS IN 9 SECONDS!!! Two in-core sort subroutines are provided for sorting data in memory. The first subroutine sorts records consisting of corresponding elements of up to 15 arrays (mixed string, floating point, and integer) using multiple ascending or descending sort keys. The second subroutine sorts records consisting of elements of a character string array using multiple substrings as ascending or descending sort keys. These sort systems are very fast, versatile, and easy to use. Sort times average 30 TIMES faster than the fastest BASIC sort routines.

READ AND WRITE ARRAYS TO TAPE. Two subroutines are provided to read and write data to cassette tape. This provides the user with the capability of reading or writing an entire array or screen image with one command. No leaders are written between data items. This significantly reduces read/write times making data tapes much more practical. Data validity checking is performed to ensure correct data is read, thus eliminating many data input/output errors.

COMPRESS AND UNCOMPRESS DATA. Two subroutines are provided which compress data in memory by removing repeated characters with the ability to uncompress the data in the minimum space possible with subsequent regeneration. This, coupled with the Read and Write Tape Data Subroutines, provides an efficient method of data storage and retrieval.

MOVE ARRAYS IN MEMORY. This subroutine moves data from one location in memory to another. This can be used to rapidly set one array of data equal to another or to move data into protected memory. The latter option provides a "common" area that can be passed from one BASIC program to another.

DUPLICATE MEMORY. Two subroutines are provided to duplicate a byte in memory. This is useful for setting arrays to zero or rapidly placing rows or columns of repeated characters on the screen.

FAST HORIZONTAL AND VERTICAL LINES. This two subroutines draw graphic lines of any length and location on the screen. These routines dramatically decrease times necessary to generate graphical displays containing lines.

DISPLAY SCREEN CONTROL. Five subroutines are provided for scrolling the screen up, down, left, right, and for generating inverse graphic displays. This can add impact to screen displays.

ORDER 16, 32, or 48K VERSION at \$24.95

FOR THE SERIOUS DISK SYSTEM USER - DISK OPERATING SYSTEM SORT MERGE "DOSORT"

SORT/MERGE multi-diskette files. DOSORT utilizes a control program written in BASIC with very efficient machine language routines for the time-critical tasks of sorting and data comparisons. An extended GSF is included which is used as an interface between the BASIC and machine language programs. The resulting system is both a versatile and effective sort merge package for the TRS-80 system.

- DOSORT includes all of the GSF ROUTINES plus extended routines for disk operation.
- DOSORT can process data files that are read or written using standard TRS-80 input/output commands.
- DOSORT sorts input files according to user specified sequences utilizing multiple ascending or descending sort keys. User exits are provided during initial input and final output processing allowing specialized processing.
- TWO MODES of sort variable specification may be used - multi-mixed-array mode and character string mode.
- MULTI-VOLUME (diskette) files may be sorted or merged on a minimum two-disk 32K system. System performance is improved with a 48K or three-or four-disk system.
- PRESORTED files may be included in a given sort/merge application. Data files may be spread over several diskettes.
- DOSORT is self-instructing-supported by comprehensive user documentation. Specification of sort parameters has been designed to be easy - even for the inexperienced user.

ORDER 32 or 48K VERSION at \$34.95

TRS-80TM MASTER PAC 100

**100 SUPER TRS-80 LEVEL II PROGRAMS. . .BUSINESS. . .
PERSONAL FINANCE. . .MATH. . .STATISTICS. . .GAMES. . .
GAMBLING**

INCLUDING

- A COMPLETE MAILING LIST PROGRAM
- AN EXTENSIVE INVENTORY CONTROL PROGRAM
- CREDIT CARD FILE
- MULTIPLE LINEAR REGRESSION
- MATRIX OPERATIONS
- A TEXT EDITOR (CAPABLE OF WRITING, EDITING, PRINTING AND SAVING BUSINESS LETTERS AND OTHER TEXT).
- STOCK MARKET ANALYSIS
- A HORSE SELECTION SYSTEM (FOR PICKING WINNERS)
- FEDERAL TAXES
- CHECKBOOK MAINTENANCE
- . . .AND **90 MORE PROGRAMS**

ALL 100 PROGRAMS CAN BE LOADED FROM CASSETTE OR DISKETTE INTO ANY TRS-80 16K LEVEL II COMPUTER. THE **MASTER PAC 100** CONTAINS A SELECTION OF PROGRAMS TAKEN FROM OUR ADVANCED PROGRAM PACS. EACH PAC COMES COMPLETE WITH UP TO 8 PRE-RECORDED CASSETTES (OR DISKETTES), INSTRUCTIONS AND DOCUMENTATION. ALL PROGRAMS CAN BE USED WITH OR WITHOUT PRINTER.



P.O. BOX 149
NEW CITY, NEW YORK 10956

PLEASE SEND ME THE FOLLOWING PACS (ADD \$10 FOR DISK VERSION):

MASTER PAC 100 (\$49.95)-INTRODUCTORY PRICE...CONTENTS ON REVERSE SIDE

FEDERAL INCOME TAX PAC (\$49.95)-COMPLETE LONG AND SHORT FORM

INVENTORY CONTROL PAC (\$99.95)-EXTENSIVE INVENTORY CONTROL

PAYROLL PAC (\$99.95)-COMPLETE PACKAGE INCLUDING CHECK WRITER

STATISTICS PAC (\$99.95)-ELEMENTARY TO ADVANCED STATISTICS

BUSINESS DECISIONS PAC (\$99.95)-STOCKS, REAL ESTATE, BREAK-EVEN ANALYSIS, ETC.

STOCK MARKET PAC (\$99.95)-PORTFOLIO FILE AND ANALYSIS

GENERAL LEDGER PAC (\$99.95)-ACCOUNTS RECEIVABLE, PAYABLE, ANALYSIS

PERSONAL FINANCE PAC (\$99.95)-CHECKBOOK MAINTENANCE, BUDGET, ETC.

MATH PAC (\$99.95)-ELEMENTARY AND ADVANCED

GAMBLING PAC I (\$99.95)-PICKING WINNING HORSES (FLATS OR TROTS), INCLUDES A

SELF-MODIFYING HORSE SYSTEM.

MASTER CHARGE NUMBER _____

VISA NUMBER _____

EXPIRATION DATE _____ SIGNATURE _____

NAME _____

ADDRESS _____

MASTER PAC 100

BUSINESS AND PERSONAL FINANCE

1. FEDERAL WITHHOLDING TAX
3. ALPHABETIZING WITH REPLACEMENT
5. COMPLETE MAILING LIST
7. CHECKBOOK MAINTENANCE
9. SHELL SORT
11. PRESENT VALUE OF FUTURE AMOUNT
13. FUTURE VALUE OF AN ANNUITY
15. RATE OF RETURN-CONSTANT INFLOW
17. MORTGAGE AMORTIZATION TABLE
19. DEPRECIATION SCHEDULE-STRAIGHT LINE
21. DEPRECIATION SCHEDULE-DECLINING BALANCE
23. DAYS BETWEEN TWO DATES
25. BAR GRAPH
27. TEXT EDITOR
29. BREAK EVEN ANALYSIS
31. ANNUAL DEBT PAYMENT
33. PROJECTED SALES
35. DEPRECIATION AND INCOME TAX
37. VALUE OF A SHARE OF STOCK
39. WORD PROCESSOR
41. EOQ INVENTORY MODEL
2. FUTURE VALUE OF AN INVESTMENT
4. ALPHABETIZING WITHOUT REPLACEMENT
6. RANDOM SELECTION PROGRAM
8. INVENTORY CONTROL
10. EFFECTIVE INTEREST RATE
12. PRESENT VALUE OF AN ANNUITY
14. RATE OF RETURN-VARIABLE INFLOW
16. REGULAR WITHDRAWAL OF INVESTMENT
18. TERM OF A LOAN
20. DEPRECIATION SCHEDULE-SUM OF DIGITS
22. CHECK WRITER
24. ANGLO-METRIC CONVERSIONS
26. LETTER WRITER
28. FILE ORGANIZER
30. COMMERCIAL PAPER DISCOUNT
32. SALVAGE VALUE
34. MERGE
36. PORTFOLIO VALUATION
38. SALES RECORD
40. CODED MESSAGE WRITER
42. CREDIT CARD FILE

MATHEMATICS AND STATISTICS

43. MEAN AND STANDARD DEVIATION
45. GEOMETRIC REGRESSION
47. MOVING AVERAGES
49. T-TEST
51. NORMAL DISTRIBUTION
53. POISSON DISTRIBUTION
55. MATRIX MULTIPLICATION
57. MATRIX INVERSE
59. QUADRATIC EQUATIONS
61. ROOTS OF EQUATION-HALF INTERVAL SEARCH
63. ROOTS OF EQUATIONS-NEWTON'S METHOD
65. ANGLE CONVERSIONS-RADIANS-DEGREES
67. ARITHMETIC TEACHER
44. LINEAR REGRESSION AND CORRELATION
46. EXPONENTIAL REGRESSION
48. TRIPLE EXPONENTIAL SMOOTHING
50. CHI-SQUARE TEST
52. BINOMIAL DISTRIBUTION
54. MATRIX ADDITION AND SUBTRACTION
56. MATRIX TRANSPOSE
58. SIMULTANEOUS EQUATIONS
60. LINEAR EQUATIONS
62. ROOTS OF POLYNOMIALS-NEWTON'S METHOD
64. PRIME FACTORS OF INTEGERS
66. INTEGRATION-TRAPAZOIDAL RULE
68. LEAST COMMON DENOMONATOR

GRAPHICS

69. SINE GRAPH
71. PICTURE GRAPH
73. SCREEN DOTS-RANDOM SYMMETRIC
70. COSINE GRAPH
72. SCREEN DOTS-RANDOM
74. TRS-80 GRAPHICS

GAMBLING AND GAMES

75. TIC-TAC-TOE
77. CRAPS
79. WALKING DRUNK
81. ARTILLERY SHOOT
83. VALENTINE HEART
85. MAGIC SQUARE
87. HIGH LOW GAMBLE
89. CALENDAR
91. HANGMAN
93. NIM
95. DAY OF THE WEEK
97. HORSE SELECTOR
99. RANDOM ROULETTE GENERATOR
76. LUNAR LANDER
78. GUESS THE NUMBER
80. STATE CAPITALS GAMES
82. ONE ARMED BANDIT
84. ROULETTE
86. HORSE RACE
88. TRS-80
90. CHANGE
92. WASHINGTON QUIZ
94. RUSSIAN ROULETTE
96. BIORHYTHM
98. RANDOM DICE GENERATOR
100. RANDOM CARD DEALER

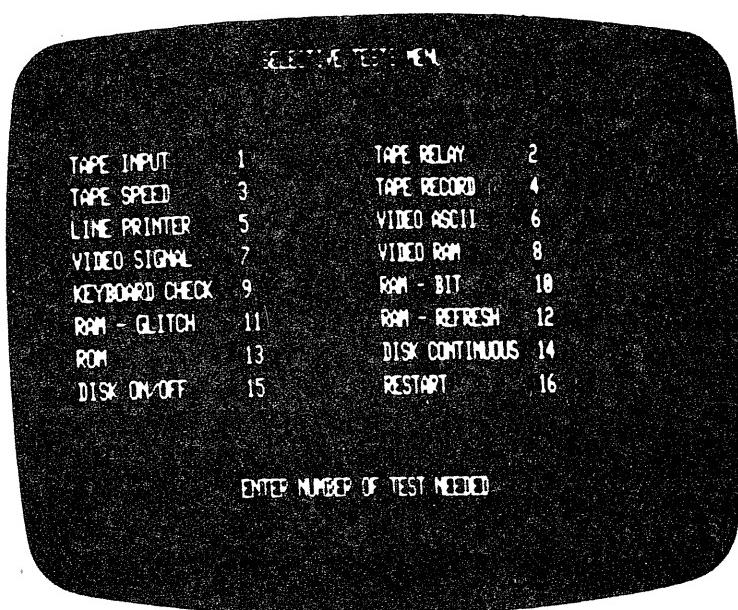
TRS-80™

FROM

TBS
INC.

The Bottom Shelf, Inc.

SYSTEM DOCTOR



- ★ CHECKS ROM TO ENSURE EVERY BIT IS FUNCTIONAL
- ★ CHECKS THE RANDOM ACCESS MEMORY SIX DIFFERENT WAYS TO ENSURE THAT ALL MEMORY LOCATIONS ARE FUNCTIONAL
- ★ CHECKS DISK DRIVES TO INSURE RELIABILITY
- ★ COMPLETE VIDEO DISPLAY AND VIDEO MEMORY CHECK
- ★ CHECKS THE PRINTER FUNCTIONS
- ★ CHECKS THE CASSETTE RECORDER FOR SPEED, DISTORTION AND VOLUME CONTROL
- ★ COMPLETE TWELVE HOUR SYSTEM CHECK ON REQUEST (WITH RESULTS PRINTED ON VIDEO, LINE PRINTER, DISK OR CASSETTE)

BASIC TOOLKIT

FROM



The Bottom Shelf, Inc.

The Basic Toolkit is the answer to your programming problems. It is a collection of programs which are primarily oriented towards aiding the Basic Language Programmer.

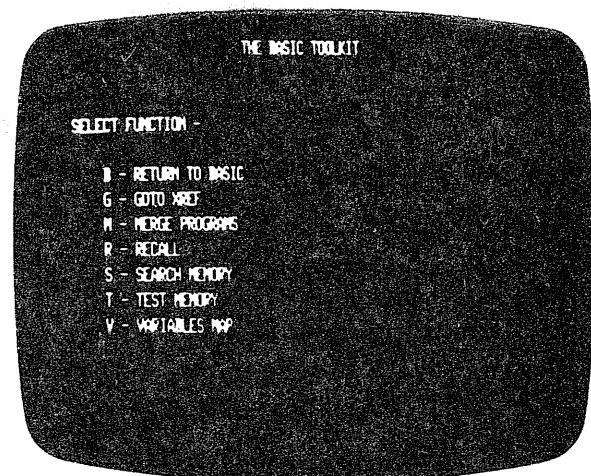
VARIABLES MAP • Will map the location of each variable you have used in your Basic Language Program. Variable Map gives you an alphabetical listing of each variable used - a list of the lines that the variable appears on - and shows the number of times the variable appears on a line.

GOTO X REF • This will list in numerical sequence, the destination of each GOTO and GOSUB statement and the line number.

RECALL • Allows you to recall programs after you have gone to DOS and returned to BASIC or after you have erroneously typed NEW.

MERGE PROGRAM • Allows you to merge programs from tape.

TEST MEMORY • Allows you to check your memory and determine that every memory location is operable.



SEARCH MEMORY • Allows you to search the memory for every occurrence of byte combinations and will list the locations where these bytes occur.

The Basic Toolkit works with both disk based and cassette based machines. The Toolkit will be resident while you are programming and will always be available by hitting shift break.

You asked for it. Now here it is. The aid you needed - 16K - 32K - 48K versions included in each Toolkit.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE

Box 149

New City, New York 10956

PLEASE SEND ME:

SYSTEM DOCTOR \$28.50 _____

BASIC TOOL KIT \$19.80 _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____



24 HOUR
ORDER
LINE
(914) 425-1535



TRS-80™

PERSONAL
INFORMATION
MANAGEMENT
SYSTEM



A READY-TO-USE
DATA BASED MANAGEMENT PROGRAM
FROM SCELBI PUBLICATIONS

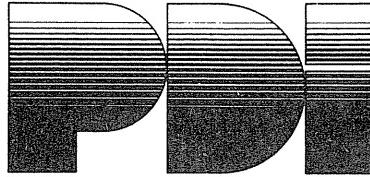
PIMS CAN PERFORM
ALL OF THE FOLLOWING FUNCTIONS

- ★ BALANCE YOUR CHECKBOOK
- ★ MAINTAIN A LIST OF CURRENT DEPARTMENT STORE CHARGES
- ★ MAINTAIN HOUSEHOLD OR BUSINESS INVENTORY
- ★ KEEP A LIST OF TAX DEDUCTIBLE EXPENSES CLASSIFIED BY CATEGORY
- ★ MAINTAIN A MAILING LIST
- ★ ACCOUNTS RECEIVABLE
- ★ SALES ANALYSIS

ONE PROGRAM DOES IT ALL!!

**PIMS IS A COMPLETE MANUAL
INCLUDING A SOURCE LISTING FOR THE TRS-80**
(PIMS IS CASSETTE BASED. SOURCE LISTING IS INCLUDED . . . PIMS IS NOT CURRENTLY AVAILABLE ON CASSETTE)

FROM



PROGRAM
DESIGN INC.

BASIC STEP BY STEP FOR LEVEL II TRS-80 OWNERS

AVAILABLE FOR LEVEL I OR LEVEL II

STEP BY STEP - Ages Junior High to Adult. TRS-80 LEVEL II
32 programs and a 64 page workbook teach programming in BASIC for the beginner. Introduces all important BASIC commands and programming logic, including simple string logic and one-dimensional arrays. Lessons are interactive, presented in a question-and-answer format on the computer screen. The Workbook adds auxiliary information and is, most importantly, a permanent reference source. Through instruction, structured practice, and frequent skills testing, the user learns how to write BASIC programs.

GRAPH BUILDER - Ages 10 up. TRS-80 LEVEL I OR II
11 teaching programs and games teach students to read graphs. Covers x and y coordinates, and representation of numerical data on graphs. Starts with simplest concepts and works up to complicated grid game.

MINICROSSWORD - All ages. TRS-80 LEVEL II
4 programs that consist of 2 minicrosswords and 2 codeword games. Crossword programs invent their own crossword puzzle -- dozens of completely different puzzles are possible -- and scores how well you do each puzzle. When used in conjunction with the codeword programs, which are word-guessing games, the course provides a vocabulary and spelling development system.

SPELLING BUILDER - Junior High up. TRS-80 LEVEL II
8 programs plus an audio cassette teach important rules and skills. Helps students and adults overcome spelling difficulties. Not just spelling drill, this course teaches a method for approaching difficult words. Ideal for the student or adult who has mastered basic spelling, but has trouble deciding if it's "supersede" or "supercede," "combustable" or "combustible". Final test of 25, ten-word lists.

PRESCHOOL IQ-BUILDER - Helps 3 to 6 year olds develop vital intellectual skills needed to learn to read. Seven programs plus Guide.

MEMORY BUILDER: CONCENTRATION - Ages 6 up.
Educational games to help children improve memory and attention span. Great for parents and kids to play together. Three games plus Guide.

STORY BUILDER/WORD MASTER - Ages 9 up.
Games that teach grammar and vocabulary. Four games plus Guide.

CODE BREAKER - Ages 10 to Adult.
Scrambled messages games that build basic word handling skills needed for good writing. Three games plus Guide.

IQ-BUILDER SERIES - Prepares you for College Board and other aptitude tests.

ANALOGIES - Junior High up.
Develops a method of solving word analogy problems and gives you practice questions. Six programs plus Guide.

NUMBER SERIES - Junior High up.
Develops a method of solving number series problems and provides practicing problems. Eight programs plus Guide.

VOCABULARY BUILDER 1 & 2 - Junior High up.
Provide practice in synonyms and antonyms. 1 is beginning; 2 is advanced. Eleven programs plus Guide.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE
A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY

COMPUTRONICS[®]
MATHEMATICAL APPLICATIONS SERVICES[™]

Box 149 New City, New York 10956



24 HOUR
ORDER
LINE
(914) 425-1535



PLEASE SEND ME:

PIMS \$9.95 _____

STEP BY STEP BASIC \$39.95 _____

GRAPH BUILDER \$13.50 _____

MINICROSSWORD \$14.95 _____

SPELLING BUILDER \$14.95 _____

PRESCHOOL IQ-BUILDER \$13.50 _____

MEMORY BUILDER \$13.50 _____

NUMBER SERIES \$13.50 _____

STORY BUILDER/WORD MASTER \$13.50 _____

ANALOGIES \$13.50 _____

VOCABULARY BUILDER 1 & 2 \$13.50 _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

RADIO SHACK COMPUTER OWNERS TRS-80 MODEL I AND MODEL II

TRS-80TM MONTHLY NEWSLETTER

- PRACTICAL APPLICATIONS
- BUSINESS
- GAMBLING • GAMES
- EDUCATION
- PERSONAL FINANCE
- BEGINNER'S CORNER
- NEW PRODUCTS
- SOFTWARE EXCHANGE
- MARKET PLACE
- QUESTIONS AND ANSWERS
- PROGRAM PRINTOUTS
- AND MORE

PROGRAMS AND ARTICLES PUBLISHED IN OUR FIRST 12 ISSUES INCLUDE THE FOLLOWING:

- A COMPLETE INCOME TAX PROGRAM (LONG AND SHORT FORM)
- INVENTORY CONTROL
- STOCK MARKET ANALYSIS
- WORD PROCESSING PROGRAM (FOR DISK OR CASSETTE)
- LOWER CASE MODIFICATION FOR YOUR VIDEO MONITOR OR PRINTER
- PAYROLL (FEDERAL TAX WITHHOLDING PROGRAM)
- EXTEND 16-DIGIT ACCURACY TO TRS-80 FUNCTIONS (SUCH AS SQUARE ROOTS AND TRIGONOMETRIC FUNCTIONS)
- NEW DISK DRIVES FOR YOUR TRS-80
- PRINTER OPTIONS AVAILABLE FOR YOUR TRS-80
- A HORSE SELECTION SYSTEM***ARITHMETIC TEACHER
- COMPLETE MAILING LIST PROGRAMS (BOTH FOR DISK OR CASSETTE SEQUENTIAL AND RANDOM ACCESS)
- RANDOM SAMPLING***BAR GRAPH
- CHECKBOOK MAINTENANCE PROGRAM
- LEVEL II UPDATES***LEVEL II INDEX
- CREDIT CARD INFORMATION STORAGE FILE
- BEGINNER'S GUIDE TO MACHINE LANGUAGE AND ASSEMBLY LANGUAGE
- LINE RENUMBERING
- AND CASSETTE TIPS, PROGRAM HINTS, LATEST PRODUCTS COMING SOON (GENERAL LEDGER, ACCOUNTS PAYABLE AND RECEIVABLE, FORTRAN-80, FINANCIAL APPLICATIONS PACKAGE, PROGRAMS FOR HOMEOWNERS, MERGE TWO PROGRAMS, STATISTICAL AND MATHEMATICAL PROGRAMS (BOTH ELEMENTARY AND ADVANCED) . . . AND

FREE WORD PROCESSING PROGRAM (Cassette or Disk)

For writing letters, text, mailing lists, etc., with each new subscriptions or renewal.



LEVEL II RAM TEST -

Checks random access memory to ensure that all memory locations are working properly.

SEND FOR OUR 36 PAGE SOFTWARE CATALOG (INCLUDING LISTINGS OF HUNDREDS OF TRS-80 PROGRAMS AVAILABLE ON CASSETTE AND DISKETTE). \$2.00 OR **FREE** WITH EACH SUBSCRIPTION OR SAMPLE ISSUE.

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE

Box 149

New City, New York 10956



24 HOUR ORDER LINE
(914) 425-1535



ONE YEAR SUBSCRIPTION \$24

TWO YEAR SUBSCRIPTION \$48

SAMPLE OF LATEST ISSUE \$ 4

START MY SUBSCRIPTION WITH ISSUE _____

(#1 - July 1978 • #7 - January 1979 • #12 - June 1979)

NEW SUBSCRIPTION _____ RENEWAL _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

*** ADD \$6/YEAR (CANADA, MEXICO) - ADD \$12/YEAR AIR MAIL - OUTSIDE OF U.S.A., CANADA & MEXICO ***

COMPUTRONICS

I
&
E MATHEMATICAL APPLICATIONS SERVICE™
INC.

DEAR TRS-80 OWNER:

THE TRS-80 MONTHLY NEWSLETTER* IS NOW THE LARGEST PUBLICATION DEVOTED TO A SINGLE COMPUTER. EVERY MONTH WE PUBLISH MAJOR ARTICLES AND PROGRAMS (WITH COMPLETE PROGRAM LISTINGS AND INSTRUCTIONS) RELATED TO BUSINESS, PERSONAL FINANCE, MONEY MANAGEMENT, EDUCATION, GAMES, PRACTICAL APPLICATIONS AND GAMBLING. WE ALSO MAKE THESE PROGRAMS AVAILABLE ON CASSETTE OR FLOPPY DISC.

PROGRAMS AND ARTICLES PUBLISHED IN OUR FIRST 8 ISSUES INCLUDE THE FOLLOWING:

A COMPLETE INCOME TAX PROGRAM (LONG AND SHORT FORM)
INVENTORY CONTROL***STOCK MARKET ANALYSIS
WORD PROCESSING PROGRAM (FOR DISC OR CASSETTE)
LOWER CASE MODIFICATION FOR YOUR VIDEO MONITOR OR PRINTER
PAYROLL (FEDERAL TAX WITHHOLDING PROGRAM)
EXTEND 16-DIGIT ACCURACY TO TRS-80 FUNCTIONS (SUCH AS
SQUARE ROOTS AND TRIGONOMETRIC FUNCTIONS)
NEW DISK DRIVES FOR YOUR TRS-80
PRINTER OPTIONS AVAILABLE FOR YOUR TRS-80
A HORSE SELECTION SYSTEM***ARITHMETIC TEACHER
COMPLETE MAILING LIST PROGRAMS (BOTH FOR DISK OR CASSETTE
-SEQUENTIAL AND RANDOM ACCESS).
RANDOM SAMPLING***BAR GRAPH
CHECKBOOK MAINTENANCE PROGRAM
LEVEL II UPDATES***LEVEL II INDEX
CREDIT CARD INFORMATION STORAGE FILE
BEGINNER'S GUIDE TO MACHINE LANGUAGE AND ASSEMBLY LANGUAGE
LINE RENUMBERING
...AND CASSETTE TIPS, PROGRAM HINTS, LATEST PRODUCTS...
...COMING SOON (GENERAL LEDGER, ACCOUNT PAYABLE AND
RECEIVABLE, FORTRAN-80, FINANCIAL APPLICATIONS
PACKAGE, PROGRAMS FOR HOMEOWNERS, MERGE TWO
PROGRAMS, STATISTICAL AND MATHEMATICAL PROGRAMS
(BOTH ELEMENTARY AND ADVANCED)...AND...

KEEP UP WITH THE LATEST TRS-80 DEVELOPMENTS. EACH MONTH WE PUBLISH A SUMMARY OF THE LATEST TRS-80 SYSTEM DEVELOPMENTS (USUALLY PRIOR TO THEIR RELEASE). IN ADDITION, ALL SUBSCRIBERS WILL RECEIVE MONTHLY LISTS OF SOFTWARE AVAILABLE ON CASSETTE OR FLOPPY DISC FROM A VARIETY OF SOURCES.

SUBSCRIBE NOW!! IF YOU ARE NOT SATISFIED, YOU WILL RECEIVE A PROMPT REFUND. DO YOU HAVE ANY QUESTIONS OR NEED SOME HELP? FEEL FREE TO CALL US. USE YOUR VISA OR MASTERCHARGE TO SUBSCRIBE.

SINCERELY,

Howard Y. Gosman
HOWARD Y. GOSMAN, EDITOR

*THE TRS-80 MONTHLY NEWSLETTER IS NOT SPONSORED, NOR IN ANY WAY OFFICIALLY SANCTIONED BY RADIO SHACK.

H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

Box 149
 New City, New York 10956
 (914) 425-1535

H & E COMPUTRONICS INC. PRICE LIST

001 ACCOUNTS PAYABLE (OSBORNE VERSION)*.....	\$ 125.00	032 GSF (32K).....	\$ 24.95
002 ACCOUNTS PAYABLE MANUAL (OSBORNE VERSION).....	\$ 15.00	033 GSF (48K).....	\$ 24.95
003 ACCOUNTS RECEIVABLE (BY DR. PETER SHENKIN)*.....	\$ 49.95	034 HOME BUDGET PAC*.....	\$ 49.95
004 ACCOUNTS RECEIVABLE (OBBORNE VERSION)*.....	\$ 125.00	035 INFORMATION SYSTEM (TBS IN MEMORY).....	\$ 24.50
005 ACCOUNTS RECEIVABLE MANUAL (OSBORNE VERSION).....	\$ 15.00	036 INTRODUCTION TO T-BUG....	\$ 6.95
006 ADVENTURE.....	\$ 14.95	037 INVENTORY CONTROL (OSBORNE COMPATIBLE)*.....	\$ 125.00
007 AIR RAID.....	\$ 14.95	038 INVENTORY CONTROL (DR. PETER SHENKIN)*.....	\$ 49.95
008 BARRICADE.....	\$ 14.95	039 LIBRARY 100.....	\$ 49.50
009 BASIC-1 (NOT FOR USE WITH PRINTER).....	\$ 15.95	040 MAIL PAC*.....	\$ 99.95
010 BASIC-1P (FOR USE WITH OR WITHOUT PRINTER).....	\$ 19.95	041 MASTER PAC 100 (CASSETTE).....	\$ 49.95
011 BASIC TOOL KIT.....	\$ 19.80	042 MASTER PAC 100 (DISKETTE)*.....	\$ 59.95
012 BASIC FOR HOME COMPUTERS.....	\$ 5.95	043 MON-3.....	\$ 49.95
013 BEAT THE HOUSE.....	\$ 14.95	044 NEW DOS + (APPARAT)*.....	\$ 99.95
014 BLOCKADE.....	\$ 14.95	045 OIL TYCOON.....	\$ 14.95
015 CHECKBOOK II.....	\$ 18.50	046 OUTWIT.....	\$ 14.95
016 CLINIC.....	\$ 14.95	047 OUTWIT II.....	\$ 14.95
017 COMPLETE BUSINESS PAC OSBORNE VERSION).....	\$ 499.95	048 PAYROLL (DR. PETER SHENKIN)*.....	\$ 49.95
018 COMPROC*.....	\$ 19.95	049 PAYROLL (OSBORNE VERSION)*.....	\$ 125.00
019 COPSYS.....	\$ 14.95	050 PAYROLL MANUAL (OSBORNE VERSION WITH COST ACCOUNTING).....	\$ 15.00
020 CP/M*.....	\$ 150.00	051 PILOT.....	\$ 25.00
021 DCV-1*.....	\$ 9.95	052 REAL TIME BASIC.....	\$ 6.95
022 DOS 3.0 (R V COOK).....	\$ 39.95	053 REMODEL-PROLOAD (16K)....	\$ 34.95
023 DOSORT (32K).....	\$ 34.95	054 REMODEL-PROLOAD (32K)....	\$ 34.95
024 DOSORT (48K).....	\$ 34.95	055 REMODEL-PROLOAD (48K)....	\$ 34.95
025 ELECTRIC PENCIL (CASSETTE VERSION).....	\$ 99.95	056 RSM-2.....	\$ 26.95
026 ELECTRIC PENCIL (DISKETTE VERSION)*.....	\$ 150.00	057 RSM-2D.....	\$ 29.95
027 FORTRAN (MICROSOFT)*.....	\$ 325.00	058 SARGON.....	\$ 19.95
028 G/2 LEVEL III BASIC.....	\$ 49.95	059 SMALL BUSINESS ACCOUNTING PAC*.....	\$ 49.95
029 GENERAL LEDGER (OSBERNE VERSION)*.....	\$ 125.00	060 SOME COMMON BASIC PROGRAMS*.....	\$ 30.50
030 GENERAL LEDGER MANUAL (OSBORNE VERSION).....	\$ 15.00	061 STATISITCS*.....	\$ 30.00
031 GSF (16K).....	\$ 24.95	062 STEP BY STEP INTRODUCTION TO 8080.....	\$ 7.95

H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

Box 149
New City, New York 10956
(914) 425-1535

063 SYSTEM DOCTOR.....	\$ 28.50	069 TRS-80 MONTHLY NEWSLETTER	
064 SYSTEM EXTENSIONS.....	\$ 3.00	(1 YEAR).....	\$ 24.00
065 THE MARKET.....	\$ 14.95	070 TRS-80 MONTHLY NEWSLETTER	
066 32 BASIC PROGRAMS (DILITHIUM PRESS).....	\$ 15.95	(2 YEARS).....	\$ 48.00
067 TIMSER.....	\$ 14.95	071 TRS-80 MONTHLY NEWSLETTER	
068 TRS-80 GRAPHICS.....	\$ 8.95	(SAMPLE ISSUE).....	\$ 4.00

*FOR DISK USERS ONLY...ALL OTHER PROGRAMS FOR CASSETTE OR DISKETTE

ALL PRICES SUBJECT TO CHANGE**WE WILL MEET ANY ADVERTISED PRICE
***ALL ORDERS PROCESSED IMMEDIATELY (OVER \$150,000 INVENTORY IN STOCK) ***
***GUARANTEED SATISFACTION...WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS
A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY).
WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING. TAPES AND
DISKETTES ARE EXCHANGED FREE OF CHARGE.***
***NO CHARGE FOR POSTAGE (ON ORDERS SHIPPED BY UNITED PARCEL SERVICE) ***
***ADD \$3 FOR ALL ORDERS SHIPPED OUTSIDE OF THE UNITED STATES (OR OUTSIDE
OF U.P.S. ZONES) ***
***ADD \$1 FOR POSTAGE AND HANDLING ON ALL ORDERS UNDER \$10
NEW YORK STATE RESIDENTS MUST ADD SALES TAX***
***CALL FOR AVAILABILITY INFORMATION FOR ITEMS NOT LISTED IN OUR CATALOG.
WE CARRY ALMOST ALL TRS-80 SOFTWARE ADVERTISED IN MAJOR COMPUTER MAGAZINES
(ALL WITH ARE REFUND GUARANTEE).***

ALSO AVAILABLEDISK DRIVES***DISKETTES***HIGH QUALITY PRINTERS***
PRINTING SUPPLIES***DISKETTES***LOWER CASE MODIFICATION KITS***LIGHT PENS***
TRS-232 PRINTER INTERFACE***DISKETTE HOLDERS AND MAILERS***AND MORE***

.....
PLEASE SEND ME THE FOLLOWING:

ITEMS # DESCRIPTION

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

TRS-80TM

DISK
BUSINESS
PACS

NEW OSBORNE & ASSOCIATES BUSINESS SYSTEM

- TRS-80 Translation Of The Wang Computer Business System
- TRS-80 Translation By Small Business Software Systems
- Immediate Delivery
- Completely Interactive Business System (Each Component Can Also Be Used Independently)
- On Diskette Ready To Run
- Step By Step Documentation (Each Manual Contains A Special User Section For Those Who Don't Require Technical Documentation)
- All Reports

GENERAL LEDGER

- Up To 250 Accounts
- Direct Or Indirect Posting
- Maintains Account Data By Month, Quarter And Year
- Income Statement And Balance Sheet Computed Monthly, Quarterly And Yearly
- Special Account Reports (On Selected Accounts)
- Verified Data Entry
- Detailed 144 Osborne Page Manual Available

INVENTORY CONTROL

- Carries More Than 1000 Items Per Diskette
- Low Stock Status Alarm
- Provisions For Item Number, Description, Vendor Number, Quantity On Hand, Unit Price, Selling Price, Average Unit Cost, Reorder Point, Backorders, Number Sold (This Period And Previous Period)
- Index Sequential
- Random Access
- Reorder Point Report
- Activity Report
- Inventory List (By Item Or Vendor)
- 50 Page Instruction Manual
- Invoicing

ACCOUNTS RECEIVABLE

- Enter, Modify And Delete Invoices
- Enter New Invoices, Billing Existing Invoices, Pay Invoices, Pay Progress Payments, Modify Existing Invoices
- Update Accounts Receivable
- Accounts Receivable Ledger
- Customer File Maintenance
- Up To 250 Accounts
- Printed Customer Statements
- Aging Account Analysis
- 317 Page Osborne Manual Available (Includes Accounts Receivable And Accounts Payable)

ACCOUNTS PAYABLE

- Check Writer
- Aging Account Status Report
- Up To 250 Accounts
- Invoice Check Off
- Calculate Checks To Pay Selected Invoices For Selected Vendors
- Vendor File Maintenance
- Enter, Modify And Delete Invoices
- 317 Page Osborne Manual Available (Includes Accounts Receivable And Accounts Payable)

PAYROLL

- Complete Computation Of All Payroll Taxes
- Check Writer
- Quarterly, Yearly And Year-To-Date Reports
- W-2 Forms • 941A
- For Hourly Or Salaried Employees
- Provision For Extra Deductions, City Deductions, Disability, Overtime (As Well As F.I.C.A., Federal And State Withholding Tax)
- 365 Page Osborne Manual Available

* Inventory Control Interactive With . . . But Not Osborne Version. All Specifications Subject To Change, All Prices Subject To Change.
** Osborne Manuals Are Required For Proper Program Operations. Program Prices Do Not Include The Osborne Manual. Osborne Manuals May Be Purchased With Or Without Programs.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY



Box 149

New City, New York 10956



24

**HOUR
ORDER
LINE**



(914) 425-1535

PLEASE SEND ME:

GENERAL LEDGER \$125.00 _____

INVENTORY CONTROL \$125.00 _____

ACCOUNTS RECEIVABLE \$125.00 _____

ACCOUNTS PAYABLE \$125.00 _____

PAYROLL \$125.00 _____

OSBORNE GENERAL LEDGER MANUAL \$15.00 _____

OSBORNE PAYROLL MANUAL \$15.00 _____

OSBORNE ACCOUNTS RECEIVABLE/PAYABLE MANUAL \$15.00 _____

COMPLETE FULLY INTEGRATED BUSINESS SYSTEM (INCLUDES ALL OF THE ABOVE) \$499.00 _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

TRS-80TM

STOCK MARKET PAC

FOR MINIMUM SYSTEM OF 16K CASSETTE OR 32K DISK SYSTEMS

This collection of programs aids both financial professionals and individuals in the evaluation, selection, and management of investment portfolios. It features: coverage of stocks, bonds, convertible securities, options, warrants, and annuities; realistic treatment of taxes and commissions; and portfolio selection methods.

PORTFOLIO BOOKKEEPING - Keep Track of all your Stocks and Bonds. Evaluates the historical profitability of a given portfolio. Also computes realized gains for income tax purposes.

EARNINGS PER SHARE ESTIMATION. Uses historical balance sheet and income data to estimate future earnings per share.

COMPOUND INTEREST. Given any three of the four terms, solves for the fourth term in the compound interest equation relating future value of a deposit to interest rate, time period, and present value.

ANNUITIES. Solves for any one of five terms in the annuity equation relating future value, present value, interest rate, periodic payment, and balloon payment for ordinary annuities, sinking funds, and annuities due.

UNEVEN CASH FLOWS. Uses sophisticated numerical techniques to calculate the rate of return on a capital investment based on the resulting cash flows generated. Also finds future value and present value of a series of uneven flows.

STOCK VALUATION. Finds current and future values of a stock and before and after tax rates of return. Also considers commissions in all calculations.

OPTION VALUATION (Black-Scholes Model). Calculates the Black-Scholes value and optimum hedge ratio of any option.

OPTION WRITING. When selling partially covered calls, or when selling puts and shorting stock, this program is used to find the maximum profit, investment, maximum return, and upper and lower break-even points.

WARRANT VALUATION. Determines the value of both short and long term warrants.

BOND VALUATION. Given present value, coupon interest, yield to maturity, maturity value, or number of periods (3 out of 4), the remaining term is found by this program. Also considers taxes and commissions and computes the current yield.

STOCK INDICATORS. Given historical market index data and stock prices, this program finds the expected return of the index and standard deviation of that return, as well as the alpha, beta, expected return, and standard deviation of return for each stock.

PORTFOLIO SELECTION (Sharpe's Model). Determines the proportion of funds that should be allocated to each security in a portfolio to maximize returns. Calculations are based on historical stock indicators and an acceptable level of risk.

CAPITAL ACCUMULATION PLANNING. Determines the future net worth of an individual or a business based on current worth, rate of investment, and rate of investment return.

DAYS BETWEEN DATES. Finds the number of days between two given dates on the Gregorian calendar.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™

Box 149

New City, New York 10956



**24 HOUR
ORDER
LINE**
(914) 425-1535



PLEASE SEND ME:

STOCK MARKET PAC \$49.95 (Disk or Cassette Version) _____

CREDIT CARD NUMBER _____ EXP. DATE _____

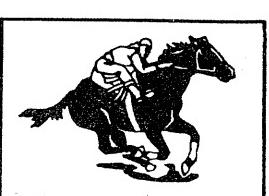
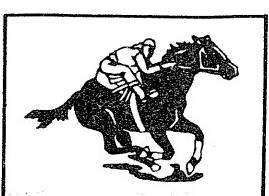
SIGNATURE _____

NAME _____

ADDRESS _____

THE HORSE SELECTOR II (FLATS)

NEW SIMPLIFIED VERSION OF THE ORIGINAL HORSE SELECTOR



**GUARANTEED
PROFIT**

91% WINS
PLACES
SHOWS

32%

**AVERAGE PROFIT
AT ALL TRACKS-
1978**

HIGHER PROFITS (OVER 100%) POSSIBLE THROUGH SELECTIVE BETTING ON

- Rates Each Horse In 10 Seconds
- Easy To Follow Rules
- Can Be Used With Any Simple 8-Digit Electronic Calculator
- 100% Money Back Guarantee (Returned For Any Reason)
- Uses 4 Factors (Speed Rating • Track Variant • Distance Of The Present Race • Distance Of The Last Race)
- Using The Above Factors, The Horse Selector Calculates The Estimated Odds. **BET** On Horse Whose Actual Payoff (From The Tote Board or Morning Line is Higher Than Payoff Based on Estimated Odds).
- Using The Above Factors, The Horse Selector Calculates The Estimated Odds. **BET** On Any Selected Horse With An Estimated Payoff (Based On Tote Board or Morning Lines) Higher Than Calculated Payoff (Based on Horse Selector II).
- Source Listing For The TRS-80, TI-59, HP-67 And Basic Computers.
- No Computer Or Calculator Necessary (Although A Calculator Would Be Helpful For The Simple Division Used To Calculate Estimated Odds)



**FREE DUTCHING TABLES ALLOWS BETTING ON 2 OR MORE HORSES
WITH A GUARANTEED PROFIT.**

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY

COMPUTRONICSTM
MATHEMATICAL APPLICATIONS SERVICES

Box 149

New City, New York 10956

PLEASE SEND ME:

HORSE SELECTOR II \$50 _____

CREDIT CARD NUMBER _____

**24 HOUR
ORDER
LINE**

(914) 425-1535

EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____



TRS-80™

MON-3
RSM - 2
RSM-2D

DCV-1
BASIC-1
AIR RAID

MON-3 MACHINE LANGUAGE PROGRAMMING FOR BEGINNERS

By Dr. Hubert S. Howe, Jr.

- BEGINNERS can learn to interact directly with the computer in machine language.
- COMPLETE manual provided with program.
- SIMPLE commands, easy for beginners to use.
- ADVANCED commands for assembly programmers and disk systems.

The features of the monitor allow you to do the following things:

- SAVE or READ SYSTEM tapes.
- SAVE SYSTEM tapes on disk.
- DISPLAY contents of memory in different ways.
- DISASSEMBLE memory to see machine language commands.
- SEARCH through memory to find specific values.
- MOVE and COMPARE memory blocks.
- MODIFY and initialize memory blocks.
- RELOCATE object programs.
- PRINT output either on video display or line printer.

MON-3 is a powerful utility program that is as useful for beginners as it is for advanced programmers. Its commands provide you with nearly everything you need to interact with the TRS-80 in machine language. More advanced features include a command that produces a symbolic tape of the disassembly that can be loaded and reassembled using the TRS-80 Editor/Assembler, and a feature that allows object programs that are to be executed anywhere in memory to be saved on disk, even if they run in the same area used by the TRSDOS system.

The program is available only for Level II BASIC computers. Specify whether you have 16K, 32K, or 48K RAM. All versions are compatible with cassette or disk.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING, FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

ALL PROGRAMS ARE FULLY DOCUMENTED

ALL PROGRAMS ON LEVEL II CASSETTE AND COME WITH COMPLETE USERS MANUAL



Box 149 New City, New York 10956

PLEASE SEND ME:

MON-3 (\$49.95) _____ DCV-1 (\$ 9.95) _____

RSM-2 (\$26.95) _____ BASIC-1 (\$15.95) _____

RSM-2D (\$29.95) _____ AIR RAID (\$14.95) _____

FOR 16K _____ 32K _____ 48K _____



24 HOUR ORDER LINE
(914) 425-1535



CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

ALL ORDERS PROCESSED IMMEDIATELY

TRS-80 SOFTWARE

FROM **SMALL
SOFTWARE
SYSTEM**

RSM-2 MACHINE LANGUAGE MONITOR

A 27-command monitor program with capabilities for entering, executing, saving and loading machine language programs. Commands to search, display, edit, zero, exchange, test, fill and verify memory. Also provides links for keyboard and CRT display access for users.

Provides access to all memory locations. You may examine your Basic ROM's, test your RAM, enter and execute machine language programs, read and write machine language tapes.

You can set BREAKPOINTS in your programs, write SYSTEM tapes, READ SYSTEM tapes and display their name and starting address, and PRINT any command with the TRS232 printer interface or the Radio Shack expansion interface! Disk commands (see RSM-2D) are included for future expansion of your system. RSM-2 loads from cassette into the top 5K of memory in Level I or Level II 16K computers so that it can reside in memory with other programs!

RSM-2D

This special disk version of RSM-2 has all the commands of both RSM-1S and RSM-2, including two commands that read or write disk sectors directly! You can read any number of disk sectors into any memory area, or write any memory area to disk! A truly unique tool for use with disk systems. RSM-2D is furnished on disk with three versions that load and run in the top 5K of 16K, 32K and 48K computers. A special loader program prompts you to select the desired version, which then loads and executes. If desired, you can make CMD files of RSM-2D by use of the TAPE-DISK command for direct execution from TRSDOS.

DCV-1 CONVERTS MACHINE LANGUAGE PROGRAMS FROM A TAPE TO A DISK PROGRAM

DCV-1 is a special SYSTEM tape that allows you to convert nearly any machine language program from a tape to a disk program. Nearly all of our software may now be executed from your disk system! This includes RSM monitors, The Electric Pencil, Air Raid, RSL-1, ESP-1 or any program that occupies less than 5K (Larger programs may be handled if you have more than 16K of memory). After DCV-1 is loaded, DCV-1 then loads any SYSTEM tape into memory starting at 6C00 Hex. A short block-move program is added at the beginning of the program, and the parameters necessary to create a disk file are displayed on the screen. TAPEDISK is then used to create a disk file. When accessed, the program loads at 6C00 Hex, moves itself to its correct address, then jumps there and executes! A super accessory for disk systems!

BASIC-1 LEVEL I BASIC FOR LEVEL II MACHINES

Level I and II without extra hardware. This program will read a 12K maximum level I program and execute it as is. It is possible to switch back and forth between level I and level II without reloading the program. Works under level II and DOS BASIC. All level I abbreviations are supported.

AIR RAID A REAL-TIME SHOOTING GALLERY

AIR RAID is an arcade-type action game that uses the high speed machine language capabilities of the TRS-80. AIR RAID offers enough challenge to keep the attention of the most dedicated of game haters, and has been known to become nearly an obsession to more than one individual. Just about the time you finally achieve that magic score of 10,000, someone points out that you're still playing the game at one of the low speeds!

AIR RAID is played on the TRS-80 video screen. A random sequence of large slow aircraft and small fast aircraft traverse the screen in both directions at seven altitudes. A missile launcher that can be pointed in 5 different directions launches missiles under your command. After launch, the flight path may be modified (if you're fast enough)! When hit, aircraft explode dramatically and the debris rains to the bottom of the screen, destroying any aircraft in its path! On occasion, two aircraft collide, destroying the aircraft and creating a parachute which settles slowly to the ground. These, of course, offer additional targets, but they are much harder to hit than the aircraft. To compensate, a higher score is tallied for parachute hits!

AIR RAID also runs in a continuous demonstration mode, providing an interesting display for shows or computer meetings. AIR RAID will provide hours of fun for you, and is an ideal program for entertaining your friends!



Box 149
New City, New York 10956
(914) 425-1535

REMODEL • PROLOAD • COPSYS • TIMSER LEVEL II TRS-80 PROFESSIONAL PROGRAMMING TOOLS YOU HAVE BEEN WAITING FOR

NOW FOR THE FIRST TIME WITH REMODEL YOU CAN:

- RENUMBER any portion or all of a basic program with line number references adjusted.
- MOVE any portion of a basic program from one location to another.
- DELETE lines or ranges of lines while using the utility.

WITH BOTH PROLOAD AND REMODEL YOU HAVE THE ADDITIONAL POWER TO:

- LOAD all or any portion of a basic program from tape (CLOAD format).
- LOAD MULTIPLE basic programs - renumbering and merging into any location.
- SAVE combined/merged programs or any portion of a program to tape.
- VERIFY bit-for-bit the contents of saved programs.

AND WITH COPSYS YOU CAN:

- COPY SYSTEM (machine language object) tapes rapidly and accurately.
- MERGE independently assembled object tapes into one load module.
- VERIFY bit-for-bit system tapes duplicated by COPSYS.

REMODEL is a powerful utility that for the first time allows the TRS-80 user to **RENUMBER** any portion or all of a basic program **MOVE**, any portion from one location to another, or **DELETE** any range of lines. This includes readjusting line number references where required. The user will find REMODEL to be an indispensable tool in program development by assisting in the creation of well organized, readable, and easy to document programs. Specify 16, 32, 48K.

PROLOAD extends the power of REMODEL with features to LOAD all or any portion of a basic program, COMBINE basic programs with renumbering and merging into any location, SAVE combined/merged programs or any portion to tape, and to VERIFY bit-for-bit the contents of saved programs. Users can now create libraries of BASIC programs or DATA statements which can then be loaded individually or in combination with other programs, thus expanding programming productivity and versatility. Requires REMODEL (16, 32, 48K). Special combined PROLOAD + REMODEL tape.

COPSYS is designed to COPY SYSTEM tapes (machine language object code) generated from the Radio Shack Editor/Assembler program. COPSYS can be used to duplicate those valuable system tapes before they become damaged.

TIMSER is a Time Series Analysis program that fits data to nine different 1st, 2nd and 3rd order curves. Goodness of fit data, tables, including projected data and confidence limits, and graphical displays of curve fit and variance are included. The program provides for correction factors and functions to test seasonal variations, inflation corrections, or cyclical variations. A detailed Users Manual is included complete with illustrated examples.

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™

Box 149 New City, New York 10956

PLEASE SEND ME:

REMODEL (\$24.95) _____ PROLOAD (\$14.95) _____

REMODEL AND PROLOAD COMBINATION (\$34.95) _____ COPSYS (\$14.95) _____

TIMSER (\$14.95) _____ FOR 16K _____ 32K _____ OR 48K _____

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____



24 HOUR ORDER LINE

(914) 425-1535



REMODEL EXAMPLES

The examples below illustrate some of the capabilities of REMODEL. A trivial sample program is used to show the status before and after the specified action is completed. User input is underlined and modified areas are shaded.

1. REQUIREMENT: Renumber the entire program using a starting

number of 10 and incrementing by 10.

User: START? END? NEW?10 BY?10 MODE? User: START?5 END?125 NEW?10 BY?10 MODE?125

PROGRAM BEFORE

```

5 PRINT 1: GOTO 24
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 63
50 PRINT 4: END
63 PRINT 5: GOTO 50
125 PRINT 6: GOTO 25

```

PROGRAM AFTER

```

10 PRINT 1: GOTO 20
20 PRINT 2: GOTO 60
30 PRINT 3: GOTO 50
40 PRINT 4: END
50 PRINT 5: GOTO 40
60 PRINT 6: GOTO 30

```

COMMENTS: Note that default values were supplied automatically for the fields left blank.

REQUIREMENT: Move lines #50-#63 between lines #5 and #24, renumbering them increments of 10 starting at 10.

User: START?50 END?100 NEW?10 BY?10 MODE? User: START?5 END?63 NEW?10 BY?10 MODE?MOV

PROGRAM BEFORE

```

5 PRINT 1: GOTO 24
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 63
50 PRINT 4: END
63 PRINT 5: GOTO 50
125 PRINT 6: GOTO 25

```

PROGRAM AFTER

```

5 PRINT 1: GOTO 24
10 PRINT 4: END
20 PRINT 5: GOTO 10
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 20
125 PRINT 6: GOTO 25

```

Comments: Blocks may be moved to any new location as long as there is sufficient room between sequence numbers, as above.

3. REQUIREMENT: Move lines #50-63 between lines #24 and #25.

User: START?25 END?25 NEW?40 BY? MODE? User: START?25 END?25 NEW?40 BY?10 MODE?NUM

User: START?50 END?63 NEW?30 BY?5 MODE? User: START?50 END?63 NEW?30 BY?5 MODE?MOV

PROGRAM BEFORE

```

5 PRINT 1: GOTO 24
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 63
50 PRINT 4: END
63 PRINT 5: GOTO 50
125 PRINT 6: GOTO 25

```

PROGRAM AFTER

```

5 PRINT 1: GOTO 24
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 63
10 PRINT 4: END
20 PRINT 5: GOTO 30
24 PRINT 2: GOTO 125
25 PRINT 3: GOTO 50
125 PRINT 6: GOTO 25

```

Comments: Two steps were required in the above example. The first renumbered line #25 to #40, and the second moved lines #50-63 between #24 and #40 producing the desired result.

REMODEL CAN BE USED IN DOS OR NON-DOS ENVIRONMENT

PROLOAD EXAMPLES

PROLOAD expands the capabilities of REMODEL as illustrated in the examples shown below. For these examples it is assumed that the following two program are on tape and positioned correctly when needed:

PROGRAM "A"

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
30 PRINT 3: GOTO 15

```

PROGRAM "B"

```

25 PRINT 4: GOTO 35
30 PRINT 5: STOP
35 PRINT 6: GOTO 30

```

User input is underlined and areas loaded or saved to tape are shaded.

1. REQUIREMENT: Load program "A" into memory.

User: START? END? NEW? BY? MODE? User: START? END?65535 NEW? BY? MODE?AT

MEMORY BEFORE

MEMORY AFTER

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
30 PRINT 3: GOTO 15

```

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
20 PRINT 5: STOP
25 PRINT 6: GOTO 20
30 PRINT 3: GOTO 15

```

COMMENTS: Default values were supplied for the START and END fields. The NEW and BY fields were not used, as a result the statements were not renumbered.

2. REQUIREMENT: Load statements #30 and #35 of program "B" between lines #15 and #30 of program "A", renumbering to #20 and #25.

User: START?30 END?35 NEW?20 BY?5 MODE?"B" User: START?30 END?35 NEW?20 BY?5 MODE?"B"

MEMORY BEFORE

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
30 PRINT 3: GOTO 15

```

MEMORY AFTER

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
20 PRINT 5: STOP
25 PRINT 6: GOTO 20
30 PRINT 3: GOTO 15

```

COMMENTS: This operation was successful because there was room between statements # 15 and #30 for the two lines desired.

3. REQUIREMENT: Save the contents of memory which contains program "A" from lines #15 to #30 to tape, renaming to program "C".

User: START?15 END?30 NEW? BY? MODE? User: START?15 END?30 NEW? BY? MODE?C

MEMORY BEFORE

PROGRAM "C" TAPE

```

10 PRINT 1: GOTO 30
15 PRINT 2: END
30 PRINT 3: GOTO 15

```

COMMENTS: Note that the NEW and BY fields were not used. Any range of lines can be saved to tape. Tapes written can be verified by using the =C= mode as for the example above.

PROLOAD CAN BE USED IN A DOS OR NON-DOS ENVIRONMENT

Announcing the marriage of the electric pencil™ to TRS-80*



*TRS-80 is a product of
Radio Shack, Div. of
Tandy Corporation

NOW! The Word Processor you've asked for!

The well known Electric Pencil, which has been in use for two years with many of the popular microcomputers, has prompted numerous requests for a version for use on the TRS-80. We are therefore proud to announce immediate availability of The Electric Pencil for the TRS-80, featuring the same fine capabilities that have made The Electric Pencil so popular. Full price for the TRS-80 version is only \$99.95.

the electric pencil

--A Proven Word Processing System

Extremely easy to use, The Electric Pencil lets you produce mailing lists, business forms, large numbers of original correspondence, camera-ready copy for printing . . . all on your TRS-80.

The Electric Pencil is a character oriented word processing system, which means you have maximum freedom and simplicity in the handling of text. No carriage returns or word hyphenations are necessary. Line formatting is done automatically by The Electric Pencil.

The Electric Pencil combines features found in more expensive systems with many capabilities you won't find anywhere. Right margin justification, page numbering and titling, and many combinations of line length, page length, and line and page spacing are always under your control. Text editing capabilities eliminate guesswork when inputting. The text appears on the video monitor as you insert it, and you can view text whenever you wish using the bidirectional variable speed scrolling feature. You can insert, delete, or relocate any text using simple keyboard commands.

The Electric Pencil has been designed to work with both Level I (16K system) and Level II models of the TRS-80, and with virtually any printer you choose.

The Electric Pencil TRS-80 Disk Version is fully interactive with the DISK READ, WRITE, DIR, and KILL routines of TRSDOS 2.1.

CASSETTE VERSION \$99.95

NEW DISK VERSION \$150.00

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE

Box 149

New City, New York 10956



24 HOUR ORDER LINE
(914) 425-1535





Box 149
New City, New York 10956
(914) 425-1535

FEATURES OF THE ELECTRIC PENCIL

1. INCLUDES COMPLETE EASY TO FOLLOW OWNER'S MANUAL.
2. CAN BE USED TO WRITE A LETTER, KEEP TRACK OF A MAILING LIST, PRINT BUSINESS FORMS OR ANY OTHER TEXT.
3. CAN BE USED WITH ANY LEVEL I OR LEVEL II 16K TRS-80.
4. INCLUDES LOWER CASE MODIFICATION INSTRUCTIONS.
5. ALLOWS YOUR COMPUTER TO ACT AS AN ADVANCED WORD PROCESSING TYPEWRITER. YOUR PRINTER.
6. SAVE TEXT ON CASSETTE.
7. LOAD TEXT FROM CASSETTE.
8. PRINT TEXT ON TRS-80 LINE PRINTER OR ANY OTHER TRS-80 COMPATIBLE PRINTER.
9. SET LEFT AND RIGHT MARGINS.
10. INSERT A CHARACTER, LINE, SENTENCE OR PARAGRAPH AND THE ELECTRIC PENCIL AUTOMATICALLY REPOSITIONS ALL TEXT AND LINES TO ACCEPT THE INSERTION.
11. DELETE A CHARACTER, LINE, SENTENCE OR PARAGRAPH AND THE ELECTRIC PENCIL AUTOMATICALLY REPOSITIONS ALL TEXT AND LINES TO FILL IN THE SPACES CREATED BY THE DELETION.
12. A STRING SEARCH FUNCTION ALLOWS THE USER TO LOCATE ANY STRING OF CHARACTERS THAT MAY EXIST IN THE FILE. THE STRING SEARCH FUNCTION IS ESPECIALLY USEFUL IN CREATING A SELECTIVE MAILING LIST. OTHER USES MAY INCLUDE LISTS OF SALES PROSPECTS WITH ACTION DATES TO REPRESENT APPOINTMENTS, EXPIRATIONS, SERVICES DATES, ETC.
13. DATA CAN BE SELECTIVELY EXTRACTED FROM A FILE AUTOMATICALLY USING THE CODED STRING SEARCH FUNCTION.
14. TAPE VERIFY VERIFIES TEXT STORED ON CASSETTE (SIMILAR TO CSAVE?).
15. WORD NUMBER WILL TELL YOU THE NUMBER OF WORDS IN YOUR TEXT.
16. RIGHT JUSTIFICATION ON REQUEST.
17. AUTOMATIC LINE SPACING.
18. AUTOMATIC PAGE SPACING.
19. UNDERLINING (ON PRINTERS ALLOWING THIS OPTION).
20. ... PLUS MANY OTHER FUNCTIONS.

PLEASE SEND ME THE ELECTRIC PENCIL. \$99. 95 IS ENCLOSED.

VISA OR MASTER CHARGE NUMBER.

CREDIT CARD EXPIRATION DATE.

SIGNATURE.

NAME.

ADDRESS.

CITY, STATE AND ZIP CODE.

BOOKS * CHECK REGISTERS
WORD PROCESSORS * FORTRAN
ACCOUNTING SYSTEMS * SOFTWARE
CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER
FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES
BOOKS * CHECK REGISTERS * EXTENSION CORDS
WORD PROCESSORS * FORTRAN * DISK DRIVES * PAYROLL
ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS
CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER
FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE

TBS SYSTEM EXTENSIONS

FROM



The Bottom Shelf, Inc.

FOR THE TRS-80

MORE THAN **100** PAGES OF FACTS, HINTS AND PRODUCTS

ORGANIZERS * ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS * REAL ESTATE PROGRAMS * COMPUTER WORKSTATIONS * CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER * MAILERS * EXTENSION CORDS * STATIC GROUNDS * FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES * INDEXING SYSTEM * BOOKS * CHECK

- 1. Hints & kinks from TBS!**
- 2. Programming aids!**
- 3. Screen formatting!**
- 4. DOS fixes!**
- 5. Full systems catalog!**
- 6. LPRINT Your Screen!**
- 7. Programming techniques for Level II**
- 8. Programming techniques for DOS**
- 9. Catalogue of new software**
- 10. Useful utility routines**
- 11. Review of the TRS-80**
- 12. Support equipment**
- 13. Applications**
- 14. Peripherals**
- 15. Supplies**
- 16. More**

FANFOLD PAPER * CASSETTE TAPE * WORD PROCESSORS *
* INTERFACES * CASSETTE ORGANIZERS * ACCOUNTING SYSTEMS
* COMPUTER WORKSTATIONS * CHECKBOOK BALANCING *
CORDS * STATIC GROUNDS * FORMS * FIRMWARE * GAMES *
BOOKS * CHECK REGISTERS * EXTENSION CORDS * TEN PLUG
STRINGS * FANFOLD PAPER * CASSETTE TAPE * WORD PROCESSORS *
* DUST COVERS * INTERFACES * CASSETTE ORGANIZERS * PRODUCT REVIEWS * REAL ESTATE

ONLY \$3.00

PROGRAMS * COMPUTER WORKSTATIONS *
MAILERS * EXTENSION CORDS * STATIC GROUNDS * FORMS
INDEXING SYSTEM * BOOKS * CHECK REGISTERS * EXTENSION
CORDS * BUSINESS SOFTWARE * DISKETTES * INDEXING SYSTEM * BOOKS
* FANFOLD PAPER * CASSETTE TAPE * WORD PROCESSORS *
* INTERFACES * CASSETTE ORGANIZERS * ACCOUNTING SYSTEMS
* BOOKS * CHECK REGISTERS * EXTENSION CORDS * TEN PLUG STRINGS * FANFOLD PAPER * CASSETTE TAPE * WORD
PROCESSORS * FORTRAN * DISK DRIVES * PAYROLL FORMS * DUST
COVERS * INTERFACES * CASSETTE ORGANIZERS * ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS * REAL ESTATE
PROGRAMS * COMPUTER WORKSTATIONS * CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER * MAILERS *
EXTENSION CORDS * STATIC GROUNDS * FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES * INDEXING
SYSTEM * BOOKS * CHECK REGISTERS * EXTENSION CORDS * TEN PLUG STRINGS * FANFOLD PAPER * CASSETTE TAPE * WORD
PROCESSORS * FORTRAN * DISK DRIVES * PAYROLL FORMS * DUST COVERS * INTERFACES * CASSETTE ORGANIZERS *
ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS * REAL ESTATE PROGRAMS * COMPUTER WORKSTATIONS *
CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER * MAILERS * EXTENSION CORDS * STATIC GROUNDS *
FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES * INDEXING SYSTEM * BOOKS * CHECK REGISTERS *

PERSONALIZED CHECKS FOR PRINTER * MAILERS * EXTENSION CORDS * STATIC GROUNDS * FORMS * FIRMWARE * GAMES
BUSINESS SOFTWARE * DISKETTES * INDEXING SYSTEM * BOOKS * CHECK REGISTERS * EXTENSION CORDS * TEN PLUG
STRINGS * FANFOLD PAPER * CASSETTE TAPE * WORD PROCESSORS * FORTRAN * DISK DRIVES * PAYROLL FORMS * DUST
COVERS * INTERFACES * CASSETTE ORGANIZERS * ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS * REAL ESTATE
PROGRAMS * COMPUTER WORKSTATIONS * CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER * MAILERS *
EXTENSION CORDS * STATIC GROUNDS * FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES * INDEXING
SYSTEM * BOOKS * CHECK REGISTERS * EXTENSION CORDS * TEN PLUG STRINGS * FANFOLD PAPER * CASSETTE TAPE * WORD
PROCESSORS * FORTRAN * DISK DRIVES * PAYROLL FORMS * DUST COVERS * INTERFACES * CASSETTE ORGANIZERS *
ACCOUNTING SYSTEMS * SOFTWARE * PRODUCT REVIEWS * REAL ESTATE PROGRAMS * COMPUTER WORKSTATIONS *
CHECKBOOK BALANCING * PERSONALIZED CHECKS FOR PRINTER * MAILERS * EXTENSION CORDS * STATIC GROUNDS *
FORMS * FIRMWARE * GAMES * BUSINESS SOFTWARE * DISKETTES * INDEXING SYSTEM * BOOKS * CHECK REGISTERS *

INTRODUCTION TO TRS-80 GRAPHICS

From DILITHIUM PRESS by DON INMAN.

CONTENTS INCLUDE:

- THE VIDEO DISPLAY

The Plot Method
The Print Method

- SITTING DUCKS

Phase I Stationary Targets
Phase II Moving Targets

- WHAT'S BEHIND BARS?

Vertical Lines
Horizontal Lines

- THE PLOT IS EXPLAINED

Rectangle Graphics

- GAMES AND ABSTRACT ART

Random Rectangle Game
Abstract Art
Abstract Art Program

• TRS-80 VIDEO DISPLAY WORKSHEET

• STRAIGHT LINES AT ODD ANGLES

• OTHER GEOMETRIC FIGURES

• BENDING A STRAIGHT LINE

• THE ETERNAL TRIANGLE

• FAR OUT IDEAS

Low cost personal computers are moving into more and more homes and classrooms. One of the most exciting capabilities of these computers is their ability to provide graphical data displays that formerly cost thousands of dollars. This book provides a complete introduction to the basics of graphics programming using dozens of real examples which run on the popular Radio-Shack TRS-80 computer.

The book begins with the most basic concepts of line drawing and leads the reader on to geometric shapes, moving figure animation, and other more advanced topics. No mathematics is required, but some familiarity with the BASIC programming language is assumed. A TRS-80 computer for running the examples would be helpful, but most concepts apply to all low cost computers with graphics capabilities.

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™
Box 149 New City, New York 10956

PLEASE SEND ME:

System Extensions (\$3.00) _____

TRS-80 Graphics (\$8.95) _____

Add \$1.00 Postage for all orders under \$10.00.

Add \$3.00 (Air Mail) on all orders sent outside of the United States, Canada or Mexico.

CREDIT CARD NUMBER _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____



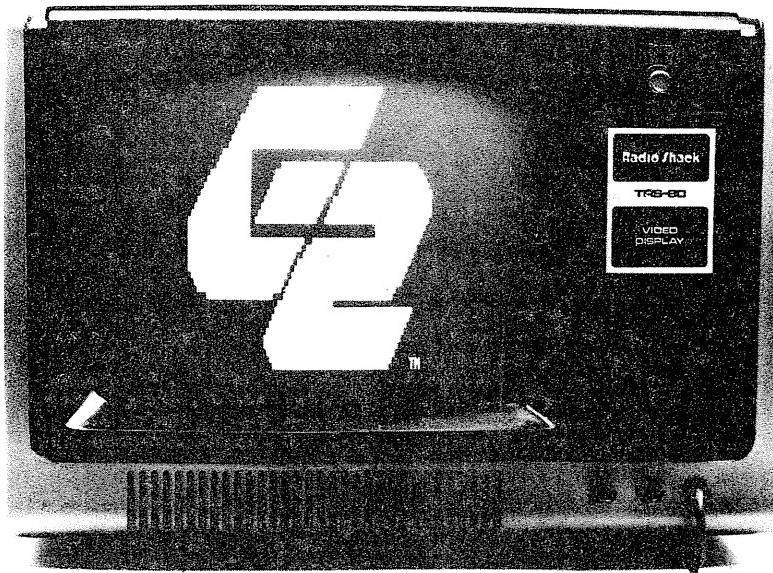
24

HOUR
ORDER
LINE

(914) 425-1535



ALL ORDERS PROCESSED IMMEDIATELY



INTRODUCING G2 LEVEL III BASIC.

Now do more than ever before with the most powerful Basic you can buy for the TRS-80.

Open the manual and load the cassette. Then get ready to work with the most powerful Basic interpreter you've ever had your hands on...Level III Basic for Radio Shack Computers. It loads right on top of the Level II ROM, and in just 5K of space, opens up your capability to new dimensions. For starters, this new cassette-based interpreter gives you the whole catalog of disk programming power. Plus graphics commands. Plus powerful editing commands. Plus long error messages, hex and octal constants and conversions, user defined functions and a number of commands never before available on either cassette or disk interpreters!

Easier Loading, Fewer Keyboard Errors. G2 Level III Basic eliminates aggravations you've had, including keyboard "bounce" and those super-sensitive tape deck settings. Programs will load easier, and you'll have far less trouble with input errors.

Basic Access to RS-232. Until now, if you wanted to access your RS-232 interface, you had to work in assembly language. G2 Level III Basic does the work for you, letting you use your interface with Basic statements.

Have You Wished for More Power? This new interpreter gives you 10 machine language user calls for subroutines, long error messages, a new TIME\$ call for your real time accessory, plus measure or limit input timing that lets you put a time limit on responses when you're playing games or giving exams. And the list doesn't stop here.

Easier and More Powerful Graphics. This new Basic includes three simple commands that can eliminate dozens of program steps. PUT transfers information from a designated array to your screen; GET reverses the process. LINE makes your computer do the work when you input beginning and end points. Give it two diagonally opposite corner locations, and it'll outline the rectangle you're looking for.

Only Microsoft Could Do It. G2 Level III Basic was created by Microsoft, the same company that wrote Level II Basic for Radio Shack. And it actually uses Level II as a foundation for this enhanced add-on. By the time you've mastered all it can do, calling up the flexibility of the graphics commands, and even enjoying the convenience of renumbering, you'll wonder how it was all possible. It's like getting a whole new computer for your computer.

Available Now for Only \$49.95. You get the power that might otherwise cost you hundreds of dollars in additional equipment for only \$49.95. Price includes the User Manual, a Quick-Reference Card, and a preprogrammed cassette tape. Load the tape, open the manual, and get ready to work with the most powerful Basic Interpreter you've ever had your hands on. G2 Level III Basic for the TRS-80. Another member of the growing G2 Personal Computer Program Library.

THE REASON
YOU BOUGHT
YOUR COMPUTER.



A Product of GRT Corporation
Consumer Computer Group

G/2 BEAT THE HOUSE \$14.95

Is a package of four game programs that closely simulate the "action" of big-time casino games of chance. Games include Blackjack, Craps, Roulette and Slot Machine. In addition to a realistic simulation of the action of the games, odds and payoffs have been programmed to yield results that are as close as possible to the odds and payoffs currently prevailing in Las Vegas. Programs are randomized to produce the same "chances" that a player has in a real-life casino play situation.

G/2 CLINIC \$14.95

Is a package of three novel programs that can help you gain new insight into your body, your lifestyle, and the ways in which you relate to some seldom-considered aspects of your heredity.

A major feature of this package is that any program can be used and enjoyed by a person with no previous experience in working with a computer. The programs have built-in "prompts", or messages that appear on the screen, telling what to do next. And most of the background explanation is also built into the program, available for the user to read or ignore to personal preference.

These programs are valuable for the information they contain, and for the entertainment value they provide. They are, of course, no substitute for professional medical advice.

G/2 THE MARKET \$14.95

Is a computer simulation of the stock market. Each game is different as your computer controls market trends in the dynamic moves of eight different corporations. You can buy stock in a utility for low risk and consistent growth, or speculate on a glamour stock for quick profits even faster losses. Players buy and sell stocks in as many as eight companies. The program is designed so that each of these companies will react differently to market fluctuations. You can buy or sell stocks short, enjoy a stock split, or perhaps go bankrupt. After all players have made their desired adjustments to their portfolios by buying and selling stocks, the market is advanced one week and a new period of trading begins. At the end of the game each player can determine by his or her financial status how good a stock market trader he or she is. The Market is a computer simulation written by Dick Ainsworth and Al Baker and produced by The Image Producers, Inc.

G/2 OIL TYCOON \$14.95

Is a game based on the wild and exciting business of oil well wildcatting. You and your opponents are independent oil producers looking to hit the newest and greatest oil strike of the year. You are presented with a map that defines geologically the area in which you are searching for oil, and based on your knowledge of geology, geo-physics, and a little bit of luck you attempt to sink wells that may hit it rich. Oil Tycoon is another imaginative computer simulation written by Dick Ainsworth and produced by The Image Producers, Inc.

G/2 OUTWIT \$14.95

Is a package of three game programs that challenge the insight and strategic skill of a player. NINES requires only basic addition, yet provides hours of fun as you play against the computer and attempt to come up with the correct combination of numbers. TOWERS OF TIBET calls for both strong strategy and an excellent memory as you attempt to solve the ancient riddle of the Tibetan monks. The further you go into the game, the harder the moves become and the better you must become. LINE-O-FIVE is played against a computer that never makes a mistake. All of the Outwit programs challenge your mind and memory.

G/2 OUTWIT II \$14.95

Is another in the continuing series of mind games. You test your skills against your opponent in trying to remember locations of numbers and combination numbers in the game of CONCENTRATION. FRAME-UP pits you against your opponent or the computer in trying to come up with the best combination of numbers available to you in a ten by ten matrix. Your opponent locks into a row or column and you must pick the best value for that column or row. The game requires that you look ahead at least three to four moves to be successful with the game. Again, more programs from G/2 to help stimulate the mind.

G/2 BLOCKADE \$14.95

Is a series of three games where you attempt to blockade your opponent and his trail into a corner of the computer screen. You enter secret tunnels or unknown areas and your trail re-emerges in different areas of the screen. A fast-paced game that requires both manual dexterity and strategic skills.

G/2 ADVENTURE \$14.95

Is a package of games that simulate the suspense and mystery of a good mystery novel. You attempt to find hidden passages that rise to new levels. You must elude demons, witches and other "baddies" to achieve your goal of success. A package that will keep the family stimulated and engrossed for hours on rainy evenings.

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A \$3 PENALTY TO COVER POSTAGE AND HANDLING.

ALL ORDERS PROCESSED IMMEDIATELY

COMPUTRONICS
MATHEMATICAL APPLICATIONS SERVICE™

Box 149

New City, New York 10956



24 HOUR ORDER LINE
(914) 425-1535



PLEASE SEND ME:

G/2 LEVEL III BASIC \$49.95 BEAT THE HOUSE \$14.95 CLINIC \$14.95

THE MARKET \$14.95 OIL TYCOON \$14.95 OUTWIT \$14.95

OUTWIT II \$14.95 BLOCKADE \$14.95 ADVENTURE \$14.95

CREDIT CARD NUMBER EXP. DATE

SIGNATURE

NAME

ADDRESS

TRS-80™

PILOT
SARGON
BARRICADE

PRACTICAL PILOT

- **(FROM PRACTICAL APPLICATIONS)**
- **FOR EASY CONVERSATION WITH YOUR TRS-80**
- **ESSENTIAL FOR EDUCATORS**
- **SIMPLIFIES COMPUTER ASSISTED INSTRUCTION**

Pilot is a dialogue oriented language which deals mainly with words and text. The syntax is extremely simple, allowing teachers and students to learn it readily. Because much educational material is essentially in English, non-mathematical users find Pilot a flexible tool for presenting materials via computer. It should be clear that Pilot was not intended to replace other computer languages. It fills a complementary place among dialogue, numerical, procedural, and curricular languages.

SARGON

- **FROM HAYDEN PRESS**
- **A COMPUTER CHESS PROGRAM ON CASSETTE**
- **FEATURES SEVERAL DIFFERENT LEVELS**
(For Beginners, Intermediate and Advanced Levels)
- **SARGON BEATS ALL THE OTHERS**
(Won The 1978 West Coast Computer Faire Chess Tournament)

BARRICADE

- **FROM SMALL SOFTWARE SYSTEM**
- **A NEW ACTION GAME FOR TRS-80**

Break through the 5-wall Barricade with the high-speed ball and keyboard controlled paddle! Trap the ball among the walls and watch it destroy the 100 blocks! Select from 8 speeds, 4 paddle sizes, and 3 ball-angle limits (96 options!) to challenge both expert and beginner. 3 scores with the best of each saved to be challenged by other players. NOBODY can achieve the maximum WEIGHTED SCORE of 33,000!

32 BASIC PROGRAMS FOR THE TRS-80 COMPUTER (LEVEL II) (FROM DILITHIUM PRESS)

Thomas H. Rugg and Phillip S. Feldman

You've bought yourself a TRS-80 computer, now what do you do? Your answer, of course, depends on your own particular situation. You will find a lot of answers in this book of computer programs especially for the TRS-80. You can use the programs as is or make the changes shown and suggested. Each of the 32 chapters FULLY documents a different program for the TRS-80! Applications, games, educational and math programs and more. Key features of the book are: 1. The programs work unchanged on a TRS-80. 2. There is a very low cost per program. 3. the programs cover a wide range of interests. 4. The authors are experienced programmers. 5. Full explanations are provided for each program. 6. Easy changes are provided, so you can make the programs work to your preference. 7. Projects are suggested for you to undertake and sufficient reference material is provided to make these projects possible.

CONTENTS: APPLICATIONS PROGRAMS - Practical uses at home or work • EDUCATIONAL PROGRAMS to help yourself or others to learn • GAME PROGRAMS—Match wits with the computer or a friend • GRAPHIC DISPLAY PROGRAMS—Dazzling visual diversions • MATHEMATICS PROGRAMS for math, engineering and statistical uses • MISCELLANEOUS PROGRAMS—Short programs that do interesting things

INTRODUCTION TO T-BUG (FROM DILITHIUM PRESS)

Don Inman and Kurt Inman

This is the **only** book to describe in detail the machine language monitor operations of the popular Radio Shack TRS-80 computer. Each command is explained and discussed in detail and examples are given to show how the commands may be used. Each step of every sample program is accompanied by a sketch of the corresponding video display for complete "no question about it" understanding of the operations. The examples constitute practical applications which make this book not only instructional, but useful as well.

REAL TIME BASIC FOR THE TRS-80 (FROM DILITHIUM PRESS)

Don Inman, Kurt Inman and Bob Albrecht

Written in the easy self-teaching style of Bob Albrecht's **MY COMPUTER LIKES ME**, this book will teach you how to read and understand programs in BASIC. Although it is intended primarily for engineers, it can be used by anyone who has a background in electronics. The first half of the book introduces control concepts using just the keyboard and the screen. In the second half, you will learn how to interface your TRS-80 to other devices and how to wire some specific micro-processor circuits.

CONTENTS: The TRS-80 • The BASIC Language • Functions and Subroutines • If-Then and All That • Realistic Computing • Interfacing TRS-80 • Some Real Problems • What You Can Do with It

A STEP BY STEP INTRODUCTION TO 8080 MICROPROCESSOR SYSTEMS (FROM DILITHIUM PRESS)

David L. Cohn and James L. Melsa

Especially useful for Beginners who want to learn machine language

This step by step presentation does not require any electronics or computer background. If you have access to an 8080 system, the book contains a number of exercises that illustrate the concepts discussed in each chapter; however, many of the exercises can be worked with pencil and paper.

CONTENTS: Introduction • Basic Machine Structure • Stored Programs • Jump Instructions • Use of Memory for Data Storage • Systems Monitors • Use of Terminal for Input and Output • Editors • Symbolic Assemblers • Stacks and Subroutines • Microcomputer Architecture • Interface Devices • Interrupts and Real-time Clocks • Peripheral Equipment • Comparison of Various Processors • Other Approaches to Programming

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING. FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

—ALL PROGRAMS ARE FULLY DOCUMENTED—

COMPUTRONICSTM
MATHEMATICAL APPLICATIONS SERVICETM

Box 149

New City, New York 10956



24 HOUR ORDER LINE
(914) 425-1535



PLEASE SEND ME:

PILOT (\$25.00) SARGON (\$19.95) BARRICADE (\$14.95) 32 BASIC (\$15.95)
INTRO TO T-BUG (\$16.95) REAL TIME BASIC (\$6.95) STEP BY STEP (\$7.95)

CREDIT CARD NUMBER EXP. DATE

SIGNATURE

NAME

ADDRESS

BASIC

FOR HOME COMPUTERS

A SELF-TEACHING GUIDE

By Bob Albrecht, LeRoy Finkel, and Jerald R. Brown
Published by John Wiley & Sons, Inc.

- **BASIC FOR BEGINNERS**
- **A SELF-TEACHING PROGRAMMED MANUAL**
- **AREAS COVERED INCLUDE**
 - YOUR PERSONAL COMPUTER
 - GETTING STARTED
 - ASSIGNMENT STATEMENTS, STORED PROGRAMS AND BRANCHING
 - DECISIONS USING IF-THEN STATEMENTS
 - READ AND DATA WORK TOGETHER
 - FOR-NEXT LOOPS
 - SUBSCRIPTED VARIABLES
 - DOUBLE SUBSCRIPTS
 - STRING VARIABLES AND STRING FUNCTIONS
 - SUBROUTINES

GUARANTEED SATISFACTION

WE ARE THE ONLY SOFTWARE COMPANY THAT OFFERS A REFUND ON ALL SOFTWARE (TO TRS-80 MONTHLY NEWSLETTER SUBSCRIBERS ONLY). WE DO CHARGE A 10% PENALTY TO COVER POSTAGE AND HANDLING. FOR EXAMPLE, IF YOU RETURN A \$100 PACKAGE, YOUR REFUND IS \$90.

-ALL PROGRAMS ARE FULLY DOCUMENTED-

PLEASE SEND ME:

BASIC FOR HOME COMPUTERS (\$5.95) _____
(Add \$1.00 for orders under \$10)

CREDIT CARD NUMBER _____ **EXP. DATE** _____

SIGNATURE _____

NAME _____

ADDRESS _____

COMPUTRONICS[®]
A
MATHEMATICAL APPLICATIONS SERVICE
Box 149
New City, New York 10956

U.S. POSTAGE
STANDARD
BULK RATE
Permit #58
New City, N.Y. 10956

FORWARDING POSTAGE
GUARANTEED
ADDRESS CORRECTION
REQUESTED